heart

Trying 3106016892...Open

Welcome to STN International! Enter x:x
LOGINID:SSSPTA1600AIR
PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2	Dec 17	The CA Lexicon available in the CAPLUS and CA files
NEWS 3	Feb 06	Engineering Information Encompass files have new names
NEWS 4	Feb 16	TOXLINE no longer being updated
NEWS 5	Apr 23	Search Derwent WPINDEX by chemical structure
NEWS 6	Apr 23	PRE-1967 REFERENCES NOW SEARCHABLE IN CAPLUS AND CA
NEWS 7	May 07	DGENE Reload
NEWS 8	Jun 20	Published patent applications (A1) are now in USPATFULL
NEWS 9	JUL 13	New SDI alert frequency now available in Derwent's DWPI and DPCI
NEWS 10	Aug 23	In-process records and more frequent updates now in MEDLINE
NEWS 11	Aug 23	PAGE IMAGES FOR 1947-1966 RECORDS IN CAPLUS AND CA
NEWS 12	Aug 23	Adis Newsletters (ADISNEWS) now available on STN
NEWS 13	Sep 17	IMSworld Pharmaceutical Company Directory name change to PHARMASEARCH
NEWS 14	Oct 09	Korean abstracts now included in Derwent World Patents Index
NEWS 15	Oct 09	Number of Derwent World Patents Index updates increased
NEWS 16	Oct 15	Calculated properties now in the REGISTRY/ZREGISTRY File
NEWS 17	Oct 22	Over 1 million reactions added to CASREACT
NEWS 18	Oct 22	DGENE GETSIM has been improved
NEWS 19	Oct 29	AAASD no longer available
NEWS 20	Nov 19	New Search Capabilities USPATFULL and USPAT2
NEWS 21	Nov 19	TOXCENTER(SM) - new toxicology file now available on STN
NEWS 22	Nov 29	COPPERLIT now available on STN
NEWS 23	Nov 29	DWPI revisions to NTIS and US Provisional Numbers
NEWS 24	Nov 30	Files VETU and VETB to have open access

NEWS EXPRESS	August 15 CURRENT WINDOWS VERSION IS V6.0c, CURRENT MACINTOSH VERSION IS V6.0 (ENG) AND V6.0J (JP), AND CURRENT DISCOVER FILE IS DATED 07 AUGUST 2001
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
NEWS WWW	CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

```
FILE 'HOME' ENTERED AT 08:42:45 ON 04 DEC 2001

=> File embase medline biosis scisearch
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.15       0.15

FILE 'EMBASE' ENTERED AT 08:43:21 ON 04 DEC 2001
COPYRIGHT (C) 2001 Elsevier Science B.V.  All rights reserved.

FILE 'MEDLINE' ENTERED AT 08:43:21 ON 04 DEC 2001

FILE 'BIOSIS' ENTERED AT 08:43:21 ON 04 DEC 2001
COPYRIGHT (C) 2001 BIOSIS(R)

FILE 'SCISEARCH' ENTERED AT 08:43:21 ON 04 DEC 2001
COPYRIGHT (C) 2001 Institute for Scientific Information (ISI) (R)

=> S cardiac graft
L1         1199 CARDIAC GRAFT

=> S tissue engineered
L2         1307 TISSUE ENGINEERED

=> L1 and L2
L1 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=>  SL1 and L2
SL1 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> S L1 and L2
L3            2 L1 AND L2

=> S myocardial graft
L4           22 MYOCARDIAL GRAFT

=> S L4 same alginate
MISSING OPERATOR L4 SAME
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> S (L4) same (alginate)
MISSING OPERATOR L4) SAME
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> Salginate
SALGINATE IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> S (alginate or polysaccharide or matrix or scaffold or microsphere)
L5       722573 (ALGINATE OR POLYSACCHARIDE OR MATRIX OR SCAFFOLD OR MICROSPHERE
                )
```

```
=> S L5 and L3
L6            2 L5 AND L3

=> S L5 and L4
L7            1 L5 AND L4

=> Duplicate Remove L3 L4 L6 L7
DUPLICATE PREFERENCE IS 'MEDLINE, SCISEARCH, EMBASE, BIOSIS'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):Y
ENTER FILE NAMES OF DUPLICATES TO KEEP:L3 L4 L6 L7
PROCESSING COMPLETED FOR L3
PROCESSING COMPLETED FOR L4
PROCESSING COMPLETED FOR L6
PROCESSING COMPLETED FOR L7
L8           12 DUPLICATE REMOVE L3 L4 L6 L7 L3 L4 L6 L7 (15 DUPLICATES REMOVED)

=> D His

     (FILE 'HOME' ENTERED AT 08:42:45 ON 04 DEC 2001)

     FILE 'EMBASE, MEDLINE, BIOSIS, SCISEARCH' ENTERED AT 08:43:21 ON 04 DEC
     2001
L1         1199 S CARDIAC GRAFT
L2         1307 S TISSUE ENGINEERED
L3            2 S L1 AND L2
L4           22 S MYOCARDIAL GRAFT
L5       722573 S (ALGINATE OR POLYSACCHARIDE OR MATRIX OR SCAFFOLD OR MICROSPH
L6            2 S L5 AND L3
L7            1 S L5 AND L4
L8           12 DUPLICATE REMOVE L3 L4 L6 L7 L3 L4 L6 L7 (15 DUPLICATES

=> Display L8 IBIB ABS TOTAL

L8   ANSWER 1 OF 12     MEDLINE                          DUPLICATE 1
ACCESSION NUMBER:   2001325818     MEDLINE
DOCUMENT NUMBER:    21225761   PubMed ID: 11326237
TITLE:              The fate of a tissue-engineered
                    cardiac graft in the right ventricular
                    outflow tract of the rat.
AUTHOR:             Sakai T; Li R K; Weisel R D; Mickle D A; Kim E T; Jia Z Q;
                    Yau T M
CORPORATE SOURCE:   Division of Cardiovascular Surgery, Department of Surgery,
                    University Health Network, University of Toronto, Toronto
                    General Hospital, 101 College St., Toronto, Ontario, Canada
                    M5G 2C4.
SOURCE:             JOURNAL OF THORACIC AND CARDIOVASCULAR SURGERY, (2001 May)
                    121 (5) 932-42.
                    Journal code: K9J; 0376343. ISSN: 0022-5223.
PUB. COUNTRY:       United States
                    Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:           English
FILE SEGMENT:       Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH:        200106
ENTRY DATE:         Entered STN: 20010611
                    Last Updated on STN: 20010611
                    Entered Medline: 20010607
AB   OBJECTIVE: The synthetic materials currently available for the repair of
     cardiac defects are nonviable, do not grow as the child develops, and do
     not contract synchronously with the heart. We developed a beating patch by
     seeding fetal cardiomyocytes in a biodegradable scaffold in vitro. The
     seeded patches survived in the right ventricular outflow tract of adult
     rats. METHODS: Cultured fetal or adult rat heart cells (1 x 10(6) cells)
```

were seeded into a gelatin sponge (15 x 15 x 1 mm), and the cell number was expanded in culture for 1 or 3 weeks, respectively. The free wall of the right ventricular outflow tract in syngeneic adult rats was resected and repaired with either unseeded patches or patches seeded with either fetal or adult cardiomyocytes (n = 10 for each group). The patches were examined histologically over a 12-week period. RESULTS: A significant inflammatory reaction was noted in the patch at 4 weeks as the scaffold dissolved. At 12 weeks, the gelatin scaffold had completely dissolved. Both types of the seeded cells were detected in the patch with 5-bromo-2'-deoxyuridine staining, and they maintained their continuity. Unseeded patches had an ingrowth of fibrous tissue. The patches became thinner between the fourth and the twelfth weeks in unseeded (P =.003), fetal (P =.0001), and adult (P =.07) cardiomyocyte groups as the scaffold dissolved. The control patch, but not the cell-seeded patches, was thinner than the normal right ventricular outflow tract. The endocardial surface area of each patch was covered with endothelial cells identified by factor VIII staining. CONCLUSIONS: A gelatin patch was used to replace the right ventricular outflow tract in syngeneic rats. The seeded cells survived in the right ventricular outflow tract after the scaffold dissolved 12 weeks after implantation. In addition, the unseeded patches encouraged the ingrowth of fibrous tissue as the scaffold dissolved and the patches remained completely endothelialized.

L8 ANSWER 2 OF 12 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 2001:189726 BIOSIS
DOCUMENT NUMBER: PREV200100189726
TITLE: Transplants for myocardial scars.
AUTHOR(S): Mickle, Donald A. G. (1); Li, Ren-Ke; Weisel, Richard D.
CORPORATE SOURCE: (1) Toronto Canada
ASSIGNEE: Genzyme Corporation
PATENT INFORMATION: US 6099832 August 08, 2000
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Aug. 8, 2000) Vol. 1237, No. 2, pp. No Pagination. e-file.
ISSN: 0098-1133.
DOCUMENT TYPE: Patent
LANGUAGE: English
AB A method is provided for forming a graft in heart tissue which comprises the transplantation of cells chosen from cardiomyocytes, fibroblasts, smooth muscle cells, endothelial cells and skeletal myoblasts. The grafts are especially useful in treating scar tissue on the heart.

L8 ANSWER 3 OF 12 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 2001:201701 BIOSIS
DOCUMENT NUMBER: PREV200100201701
TITLE: **Myocardial graft** constructs.
AUTHOR(S): Geddes, Leslie A. (1); Badylak, Stephen F.; Matheny, Robert G.; Schoenlein, William E.; Obermiller, Fred J.; Havel, William J.
CORPORATE SOURCE: (1) West Lafayette, IN USA
ASSIGNEE: Purdue Research Foundation
PATENT INFORMATION: US 6096347 August 01, 2000
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Aug. 1, 2000) Vol. 1237, No. 1, pp. No Pagination. e-file.
ISSN: 0098-1133.
DOCUMENT TYPE: Patent
LANGUAGE: English
AB The use of submucosal tissue of a warm blooded vertebrate to manufacture a tissue graft composition that induces the formation of endogenous cardiac tissues in vivo upon contact of the cardiac tissues with the manufactured composition.

L8 ANSWER 4 OF 12 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 2000:332937 BIOSIS
DOCUMENT NUMBER: PREV200000332937
TITLE: **Myocardial grafts** and cellular compositions.
AUTHOR(S): Field, Loren J. (1)
CORPORATE SOURCE: (1) Indianapolis, IN USA
ASSIGNEE: Indiana University Foundation, Bloomington, IN, USA
PATENT INFORMATION: US 6015671 January 18, 2000
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Jan. 18, 2000) Vol. 1230, No. 3, pp. No pagination. e-file.
ISSN: 0098-1133.
DOCUMENT TYPE: Patent
LANGUAGE: English
AB Described are preferred **myocardial grafts** of skeletal myoblasts or cardiomyocytes, and cellular compositions and methods useful in obtaining the grafts. The **myocardial grafts** are stable and can be used, for example, to deliver recombinant proteins directly to the heart.

L8 ANSWER 5 OF 12 MEDLINE DUPLICATE 2
ACCESSION NUMBER: 1999348190 MEDLINE
DOCUMENT NUMBER: 99348190 PubMed ID: 10417397
TITLE: Spatiotemporal development and distribution of intercellular junctions in adult rat cardiomyocytes in culture.
AUTHOR: Kostin S; Hein S; Bauer E P; Schaper J
CORPORATE SOURCE: Department of Experimental Cardiology, Max-Planck-Institute, Bad Nauheim, Germany.
SOURCE: CIRCULATION RESEARCH, (1999 Jul 23) 85 (2) 154-67.
Journal code: DAJ; 0047103. ISSN: 0009-7330.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199908
ENTRY DATE: Entered STN: 19990820
Last Updated on STN: 19990820
Entered Medline: 19990812
AB The mode of development of the intercalated disk (ID) is largely unknown, and the hypothesis was tested that the assembly of cell adhesion junctions may precede the formation of gap junctions (GJ) in developing ID in adult rat cardiomyocyte (ARC) in long-term culture. Immunostaining for connexin 43 (Cx43) and for cell adhesion junction proteins (N-cadherin, catenins, and desmoplakin) in single- and double-label techniques was analyzed and quantified by confocal and electron microscopy. All proteins investigated disappeared 48 hours after ARC isolation and reappeared parallel to redifferentiation of ARC. The newly formed ID, observed after 5 days, showed the presence of N-cadherin, catenins, and desmoplakin, low levels of Cx43, and absence of ultrastructurally discernible gap junctions. A progressive incorporation of Cx43 within ID was observed after 6 days, when cell adhesion junction proteins were already organized as zipper-like structures. Quantitative confocal analysis revealed a progressive augmentation of the fluorescence intensity of Cx43, associated with an increase in both the number and size of GJ, resulting in a substantial increase in the percentage of total GJ length per reassembled ID from 1.67% (day 6) to 15.58% (day 12). In the present study, we show that (1) the formation of the ID can be followed in ARC in culture and (2) the assembly of the adhering type of junction is the prerequisite for

subsequent GJ formation within the ID. These findings may have clinical relevance in elaborating strategies for using **myocardial grafts** and for the potential restoration of GJ communication in cardiac diseases.

L8 ANSWER 6 OF 12 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 3
ACCESSION NUMBER: 1999:479585 BIOSIS
DOCUMENT NUMBER: PREV199900479585
TITLE: Bioengineered grafts to repair the infarcted myocardium.
AUTHOR(S): Leor, J. (1); Aboulafia-Etzion, S. (1); Shapiro, L.; Barbash, I. (1); Battler, A. (1); Granot, Y. (1); Cohen, S.
CORPORATE SOURCE: (1) Cardiology Dept, Ben-Gurion University, Beer Sheva Israel
SOURCE: European Heart Journal, (Aug., 1999) Vol. 20, No. ABSTR. SUPPL., pp. 29.
Meeting Info.: XXIst Congress of the European Society of Cardiology Barcelona, Spain August 28-September 1, 1999 European Society of Cardiology
. ISSN: 0195-668X.
DOCUMENT TYPE: Conference
LANGUAGE: English

L8 ANSWER 7 OF 12 MEDLINE DUPLICATE 4
ACCESSION NUMBER: 1998338336 MEDLINE
DOCUMENT NUMBER: 98338336 PubMed ID: 9673548
TITLE: L-arginine: effect on reperfusion injury after heart transplantation.
AUTHOR: Szabo G; Bahrle S; Batkai S; Stumpf N; Dengler T J; Zimmermann R; Vahl C F; Hagl S
CORPORATE SOURCE: Department of Cardiac Surgery, University of Heidelberg, Germany.
SOURCE: WORLD JOURNAL OF SURGERY, (1998 Aug) 22 (8) 791-7; discussion 797-8.
Journal code: XO8; 7704052. ISSN: 0364-2313.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199808
ENTRY DATE: Entered STN: 19980820
Last Updated on STN: 19980820
Entered Medline: 19980807

AB Global myocardial ischemia and reperfusion injury play a major role in early postoperative **myocardial graft** dysfunction. The aim of the present study was to investigate the effects of the nitric oxide (NO) precursor L-arginine on myocardial and endothelial function after hypothermic ischemia and reperfusion in a heterotopic rat heart transplantation model. After 1 hour ischemic preservation, reperfusion was started after application of placebo (control, n = 12) or L-arginine (L-Arg 40 mg/kg, n = 12), a substrate of NO synthesis. Myocardial blood flow (MBF) was assessed by the hydrogen clearance method. An implanted balloon was used to obtain pressure-volume relations of the transplanted heart. Left ventricular developed pressure (LVDP), rate of pressure development (dP/dt), end-diastolic pressure (LVEDP), isovolumic relaxation constant (TE), and MBF were measured after 60 minutes and 24 hours of reperfusion. endothelium-dependent vasodilatation in response to acetylcholine (ACh) and endothelium-independent vasodilatation in response to sodium nitroprusside (SNP) were also determined. After 1 hour the MBF was significantly higher in the L-Arg group (3.6 +/- 0.6 vs. 1.9 +/- 0.2 ml/min/g, $p < 0.05$). The L-Arg group showed better recovery of systolic function and myocardial relaxation (LVDP 106 +/- 6 VS. 70 +/- 7 mmHg, $p < 0.05$; maximal dP/dt 5145 +/- 498 vs. 3410 +/- 257 mmHg/s, $P < 0.05$; TE

12.1 +/- 0.9 vs. 16.1 +/- 1.5 ms, p < 0.05, at an intraventricular volume of 80 microliters). LVEDP was similar in the two groups. After 24 hours no difference was found between the groups for basal MBF, LVP dP/dt, TE, LVEDP, or the response of MBF to SNP. However, ACh led to a significantly higher increase in MBF in the L-Arg group (52 +/- 8% vs. 29 +/- 7%, p < 0.05). These results indicate that (1) NO donation improves myocardial and endothelial functional recovery during early reperfusion after heart transplantation; and (2) initial treatment with L-Arg has a persisting beneficial effect against reperfusion-induced graft coronary endothelial dysfunction during late reperfusion.

L8 ANSWER 8 OF 12 MEDLINE DUPLICATE 5
ACCESSION NUMBER: 96000633 MEDLINE
DOCUMENT NUMBER: 96000633 PubMed ID: 7473787
TITLE: Rapid conversion from beta-MHC to alpha-MHC mRNA expression in embryonic rat ventricle cultured in oculo is not dependent on thyroid hormone or testosterone.
AUTHOR: Tucker D C; Umeda P K
CORPORATE SOURCE: Department of Psychology, University of Alabama at Birmingham 35294, USA.
CONTRACT NUMBER: R01 HL42258 (NHLBI)
R01 HL44094 (NHLBI)
R29 HL39048 (NHLBI)
SOURCE: JOURNAL OF MOLECULAR AND CELLULAR CARDIOLOGY, (1995 Jul) 27 (7) 1415-25.
Journal code: J72; 0262322. ISSN: 0022-2828.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199512
ENTRY DATE: Entered STN: 19960124
Last Updated on STN: 19960124
Entered Medline: 19951204

AB We investigated the expression of myosin heavy chain (MHC) isoenzymes in embryonic rat ventricles cultured in the anterior eye chamber of an adult rat. In oculo, these grafts beat and mature in an environment where the hormonal milieu can be manipulated. S1 nuclease protection assays were performed on pooled samples of ventricle grafts and compared to normally growing ventricles. At the time of grafting (embryonic day 12, E-12), 23 +/- 4% of the MHC mRNA was of the alpha isoform. While the proportion of ventricular alpha-MHC mRNA did not increase in utero, embryonic ventricles cultured in oculo showed a rapid increase in the relative amount of alpha-MHC mRNA expression (to 84 +/- 10% by 3 days and 86 +/- 5% by 8 days in oculo). alpha-MHC mRNA expression predominated through 8 weeks of culture in oculo, being 76% at 8 weeks in oculo. Additional experiments were performed to determine whether the rapid conversion to alpha-MHC expression resulted from exposure to adult levels of testosterone or thyroid hormone. Reduction of testosterone exposure to nondetectable levels by host orchiectomy did not affect the rapid conversion to alpha-MHC mRNA expression. Exposure to a hypothyroid milieu (i.e., PTU-treated hosts) decreased but did not prevent the conversion from beta- to alpha-MHC mRNA expression at 8 days in oculo; with 83% of the MHC mRNA being of the alpha isoform in hypothyroid hosts compared to 95% in euthyroid hosts. After 8 weeks of culture in hypothyroid hosts, however, alpha-MHC mRNA expression was undetectable in grafted ventricles. These data suggest that E-12 **myocardial grafts** respond to the hormonal milieu of an adult rat with rapid conversion from beta- to alpha-MHC mRNA expression and that alpha-MHC expression in early developing heart may show reduced sensitivity to downward modulation by a hypothyroid hormonal milieu.

L8 ANSWER 9 OF 12 MEDLINE DUPLICATE 6
ACCESSION NUMBER: 96098714 MEDLINE
DOCUMENT NUMBER: 96098714 PubMed ID: 8559597
TITLE: Glucocorticoid stimulation interacts with sympathetic innervation to affect cardiac development in oculo.
AUTHOR: Torres A; Tucker D C
CORPORATE SOURCE: Department of Psychology, University of Alabama at Birmingham 35294, USA.
CONTRACT NUMBER: R01 HL-42258 (NHLBI)
R29-HL39048 (NHLBI)
SOURCE: PEDIATRIC RESEARCH, (1995 Oct) 38 (4) 479-84.
Journal code: OWL; 0100714. ISSN: 0031-3998.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199602
ENTRY DATE: Entered STN: 19960312
Last Updated on STN: 19960312
Entered Medline: 19960226

AB The effects of chronic glucocorticoid stimulation and sympathetic innervation on myocardium developing in the absence of hemodynamic load were tested by grafting embryonic rat hearts into the anterior eye chamber (in oculo) of adult host rats. **Myocardial grafts** in control rats with normal hormonal milieu were compared with grafts in rats with chronic glucocorticoid stimulation (dexamethasone 40 micrograms/d) or glucocorticoid receptor type II blockade (RU 38486, 330 micrograms/d). Unilateral superior cervical ganglionectomy of one eye chamber prevented sympathetic innervation to one graft in each host. Two indices of growth, graft size (projected area) and terminal graft weight, were obtained. Dexamethasone treatment increased both size and weight of sympathetically innervated grafts, whereas RU486 treatment significantly decreased graft weight. Conversely, dexamethasone treatment decreased graft size in denervated eye chambers, whereas RU486 treatment had no effect. No differences in graft beating rate were observed among conditions. Sympathetic innervation modulated the effect of glucocorticoids on developing myocardium, suggesting that growth of sympathetically innervated myocardium is enhanced with glucocorticoid exposure, but growth of noninnervated myocardium (e.g. fetal heart) may be compromised by excessive glucocorticoid exposure.

L8 ANSWER 10 OF 12 SCISEARCH COPYRIGHT 2001 ISI (R)
ACCESSION NUMBER: 93:344321 SCISEARCH
THE GENUINE ARTICLE: LD347
TITLE: LONG-TERM SURVIVAL OF AT-1 CARDIOMYOCYTE GRAFTS IN SYNGENEIC MYOCARDIUM
AUTHOR: KOH G Y; SOONPAA M H; KLUG M G; FIELD L J (Reprint)
CORPORATE SOURCE: INDIANA UNIV, SCH MED, KRANNERT INST CARDIOL, 1111 W 10TH ST, INDIANAPOLIS, IN, 46202
COUNTRY OF AUTHOR: USA
SOURCE: AMERICAN JOURNAL OF PHYSIOLOGY, (MAY 1993) Vol. 264, No. 5, Part 2, pp. H1727-H1733.
ISSN: 0002-9513.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE
LANGUAGE: ENGLISH
REFERENCE COUNT: 31

ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB The long-term viability of cardiomyocyte grafts in the adult myocardium was tested. AT-1 cardiomyocytes, a differentiated tumor line derived from transgenic mice expressing an atrial natriuretic factor-simian virus 40 T antigen fusion gene, were grafted directly into the myocardium of

syngeneic animals. Viable grafts were detected as long as 4 mo postimplantation. Thymidine uptake studies suggested that the grafted cardiomyocytes retained mitotic activity. The presence of AT-1 cardiomyocyte grafts and the associated myocardial remodeling were not accompanied by overt cardiac arrhythmia. Electron microscopic analyses showed that the majority of the grafts were juxtaposed directly to the host myocardium and were not encapsulated. This study indicates that the myocardium can serve as a stable platform for cells that have been manipulated in vitro and suggests that cardiomyocyte grafts may provide a useful means for the local delivery of recombinant molecules to the heart. The long-term survival of the AT-1 cardiomyocytes in the heart also raises the possibility that similar grafting approaches may be used to replace diseased myocardium.

L8 ANSWER 11 OF 12 MEDLINE
ACCESSION NUMBER: 85283055 MEDLINE
DOCUMENT NUMBER: 85283055 PubMed ID: 3896556
TITLE: Early detection of cardiac allograft rejection with proton nuclear magnetic resonance.
AUTHOR: Sasaguri S; LaRaia P J; Fabri B M; Fallon J T; Ayelsworth C A; D'Ambra M N; Newell J B; Brady T J; Buckley M J
CONTRACT NUMBER: 1 K04 CIAC0848-03 (CID)
SOURCE: CIRCULATION, (1985 Sep) 72 (3 Pt 2) II231-6.
Journal code: DAW; 0147763. ISSN: 0009-7322.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 198510
ENTRY DATE: Entered STN: 19900320
Last Updated on STN: 19900320
Entered Medline: 19851003

AB No reliable, noninvasive technique is currently available for the early detection of cardiac transplant rejection. In this study, pulse nuclear magnetic resonance (NMR) spectroscopy was used (20 MHz) to detect cardiac allograft rejection in rats. Proton spin-lattice relaxation time (T1), proton spin-spin relaxation time (T2), and water content were measured in both recipient and donor hearts at 2, 4, 6, and 8 days after transplantation. Pathologic specimens were scored on a 0 to 4+ scale of increasing evidence of rejection by light microscopy. Three kinds of heterotopic transplants were performed for a total of 90: (1) Lewis rats received Lewis rat isografts, (2) Lewis rats received Brown Norway rat allografts, and (3) Lewis rats received cyclosporin A-treated allografts (15 mg/kg/day). T1 in group 2 was significantly higher than that in group 1 as early as day 2 (670 + 25 vs 616 + 11 msec, p less than .001), when histologic scores were not different. T2 in group 2 was also higher than that in group 1 (48.0 +/- 5.0 vs 41.1 +/- 2.6, p less than .005). T1 and T2 in group 2 increased from day 4 and correlated well with the water content of the hearts (r = .70 and r = .75, respectively). Cyclosporin A completely suppressed the increase of T1 and T2 in group 2. Treatment with cyclosporin also suppressed the histologic rejection scores. Our data suggest that proton relaxation time measurement may be a sensitive technique for detecting the onset of rejection and examining the therapeutic effects of cyclosporin. NMR imaging, which highlights T1 and T2 separately, should provide a sensitive noninvasive means of assessing **myocardial graft** rejection.

L8 ANSWER 12 OF 12 SCISEARCH COPYRIGHT 2001 ISI (R)
ACCESSION NUMBER: 85:331505 SCISEARCH
THE GENUINE ARTICLE: AJK77
TITLE: EARLY DETECTION OF **MYOCARDIAL GRAFT**
-REJECTION BY ULTRASOUND - DATA ACQUISITION-SYSTEM

AUTHOR: PEECHATKA F (Reprint); SHUNG K K
CORPORATE SOURCE: PENN STATE UNIV, BIOENGN PROGRAM, UNIVERSITY PK, PA, 16802
COUNTRY OF AUTHOR: USA
SOURCE: ULTRASONIC IMAGING, (1985) Vol. 7, No. 1, pp. 96.
DOCUMENT TYPE: Conference; Journal
FILE SEGMENT: ENGI
LANGUAGE: ENGLISH
REFERENCE COUNT: 1

Cardiac Transplant

Trying 3106016892...Open

Welcome to STN International! Enter x:x
LOGINID:SSSPTA1600AIR
PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2	Dec 17	The CA Lexicon available in the CAPLUS and CA files
NEWS 3	Feb 06	Engineering Information Encompass files have new names
NEWS 4	Feb 16	TOXLINE no longer being updated
NEWS 5	Apr 23	Search Derwent WPINDEX by chemical structure
NEWS 6	Apr 23	PRE-1967 REFERENCES NOW SEARCHABLE IN CAPLUS AND CA
NEWS 7	May 07	DGENE Reload
NEWS 8	Jun 20	Published patent applications (A1) are now in USPATFULL
NEWS 9	JUL 13	New SDI alert frequency now available in Derwent's DWPI and DPCI
NEWS 10	Aug 23	In-process records and more frequent updates now in MEDLINE
NEWS 11	Aug 23	PAGE IMAGES FOR 1947-1966 RECORDS IN CAPLUS AND CA
NEWS 12	Aug 23	Adis Newsletters (ADISNEWS) now available on STN
NEWS 13	Sep 17	IMSworld Pharmaceutical Company Directory name change to PHARMASEARCH
NEWS 14	Oct 09	Korean abstracts now included in Derwent World Patents Index
NEWS 15	Oct 09	Number of Derwent World Patents Index updates increased
NEWS 16	Oct 15	Calculated properties now in the REGISTRY/ZREGISTRY File
NEWS 17	Oct 22	Over 1 million reactions added to CASREACT
NEWS 18	Oct 22	DGENE GETSIM has been improved
NEWS 19	Oct 29	AAASD no longer available
NEWS 20	Nov 19	New Search Capabilities USPATFULL and USPAT2
NEWS 21	Nov 19	TOXCENTER(SM) - new toxicology file now available on STN
NEWS 22	Nov 29	COPPERLIT now available on STN
NEWS 23	Nov 29	DWPI revisions to NTIS and US Provisional Numbers
NEWS 24	Nov 30	Files VETU and VETB to have open access

NEWS EXPRESS	August 15 CURRENT WINDOWS VERSION IS V6.0c, CURRENT MACINTOSH VERSION IS V6.0 (ENG) AND V6.0J (JP), AND CURRENT DISCOVER FILE IS DATED 07 AUGUST 2001
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
NEWS WWW	CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 13:09:14 ON 04 DEC 2001

=> File medline biosis
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.15	0.15

FILE 'MEDLINE' ENTERED AT 13:09:33 ON 04 DEC 2001

FILE 'BIOSIS' ENTERED AT 13:09:33 ON 04 DEC 2001
COPYRIGHT (C) 2001 BIOSIS(R)

=> S (cardiac graft rejection)
L1 95 (CARDIAC GRAFT REJECTION)

=> Duplicate remove L1
DUPLICATE PREFERENCE IS 'MEDLINE, BIOSIS'
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):Y
ENTER FILE NAMES OF DUPLICATES TO KEEP:Medline biosis
PROCESSING COMPLETED FOR L1
L2 95 DUPLICATE REMOVE L1 MEDLINE BIOSIS (0 DUPLICATES REMOVED)

=> D his

(FILE 'HOME' ENTERED AT 13:09:14 ON 04 DEC 2001)

FILE 'MEDLINE, BIOSIS' ENTERED AT 13:09:33 ON 04 DEC 2001
L1 95 S (CARDIAC GRAFT REJECTION)
L2 95 DUPLICATE REMOVE L1 MEDLINE BIOSIS (0 DUPLICATES REMOVED)

=> Display L2 IBIB ABS TOTAL

L2 ANSWER 1 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 2001:502083 BIOSIS
DOCUMENT NUMBER: PREV200100502083
TITLE: Accelerated graft arteriosclerosis in cardiac transplants: Complement activation promotes progression of lesions from medium to large arteries.
AUTHOR(S): Qian, Zhiping; Hu, Weiming; Liu, Jinhuan; Sanfilippo, Fred; Hruban, Ralph H.; Baldwin, William M., III (1)
CORPORATE SOURCE: (1) Department of Pathology, Johns Hopkins University School of Medicine, 720 Rutland Avenue, Ross Research Bldg., Room 664-D, Baltimore, MD, 21205-2196: zpqian@jhmi.edu, wbaldwin@jhmi.edu USA
SOURCE: Transplantation (Baltimore), (September 15, 2001) Vol. 72, No. 5, pp. 900-906. print.
ISSN: 0041-1337.
DOCUMENT TYPE: Article
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Background: A critical role for the terminal components of complement (C5b-C9) has been demonstrated previously in acute allograft rejection with the use of C6-deficient PVG congenic rat strains. The C6 deficiency prevents the formation of membrane attack complex (MAC) by C5b-C9. Hearts transplanted from PVG.1A (RT1a) rats are rejected acutely (7-9 days) by fully MHC incompatible C6-sufficient PVG.1L (RT11) recipients, but they survive significantly longer in untreated C6-deficient PVG.1L recipients (19 to >60 days). Methods: To investigate the contribution of MAC to chronic rejection and accelerated graft arteriosclerosis (AGA) in long-term cardiac allografts, hearts were transplanted heterotopically from PVG.1A donors to C6-sufficient and C6-deficient PVG.1L hosts that were treated with cyclosporine 15 mg/kg/day for 14 days after cardiac

grafting. Alloantibody responses in hosts were measured by flow cytometry at 4, 8, 12, and 16 weeks after transplantation. Vigorously contracting grafts were removed at 60 days (n=5) and at 90-128 days (n=12) after surgery for morphological evaluation. Computerized planimetry measurements were made in complete cross-sections of grafts on all assessable arteries larger than 16 microns in diameter. Results: The survival of most (six of seven) cardiac allografts in C6-deficient recipients was prolonged by cyclosporine treatment to greater than 90 days. In contrast, 14 of 25 hearts that were transplanted to C6-sufficient recipients were rejected between 21 and 84 days with severe vascular injury. AGA, defined as smooth muscle cells forming a neointima inside the internal elastic lamina and luminal compromise, affected a greater percentage of arteries in C6-sufficient than in C6-deficient recipients. AGA developed earlier and more frequently in arteries of medium (<100 micron) diameter than those of large diameter in both C6-sufficient and C6-deficient recipients. Serial sections demonstrated the lesions in medium arteries to be located adjacent to the smooth muscle sphincters at the junction of arteriolar branches. Conclusions: These results demonstrate that MAC promotes the pathogenesis of AGA in long-term cardiac allografts.

L2 ANSWER 2 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 2001:445423 BIOSIS
DOCUMENT NUMBER: PREV200100445423
TITLE: Recipient HLA-DR3, tumour necrosis factor-alpha promoter allele-2 (tumour necrosis factor-2) and cytomegalovirus infection are inter-related risk factors for chronic rejection of liver grafts.
AUTHOR(S): Evans, Paul C.; Smith, Sheila; Hirschfield, Gideon; Rigopoulou, Eirini; Wreghitt, Timothy G.; Wight, Derek G. D.; Taylor, Craig J.; Alexander, Graeme J. M. (1)
CORPORATE SOURCE: (1) Department of Medicine, University School of Clinical Medicine, Addenbrooke's NHS Trust, Hills Road, Cambridge: gja1000@cam.ac.uk UK
SOURCE: Journal of Hepatology, (May, 2001) Vol. 34, No. 5, pp. 711-715. print.
ISSN: 0168-8278.
DOCUMENT TYPE: Article
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Background/Aims: The tumour necrosis factor (TNF)-2 promoter allele, which elicits elevated expression of TNF-alpha, is in linkage disequilibrium with the extended haplotype HLA-A1-B8-DR3-DQ2. TNF-2 and HLA-DR3 have been implicated in renal and **cardiac graft rejection** and loss. Cytomegalovirus (CMV) infection has been associated with chronic allograft rejection. We examined the relationship between HLA-DR3, promoter allele TNF-2 and cytomegalovirus in relation to chronic rejection following liver transplantation. Methods: (i) Retrospective analysis of HLA-DR3 was performed in 307 liver transplant recipients and 283 donors. (ii) Prospective analysis of TNF-alpha, promoter allele status, HLA-DR3 status and cytomegalovirus infection was assessed in 123 recipients. Results: (i) Retrospective analysis. Recipient HLA-DR3 (relative risk 1.9; 95% C.I. 1.01-3.58) was a risk factor for chronic rejection. (ii) Prospective analysis. Recipient HLA-DR3 was a risk factor for chronic rejection (relative risk 3.41; 95% C.I. 1.66-7.03) which was elevated further by superimposed CMV infection (relative risk 5.01; 95% C.I. 2-12.55). Recipient TNF-2 was associated with chronic rejection (relative risk 2.29; 95% C.I. 0.9-5.83) through linkage to HLA-DR3. Conclusions: Recipient HLA-DR3, TNF-2 status and CMV infection were inter-related risk factors for chronic rejection of liver grafts.

L2 ANSWER 3 OF 95 MEDLINE DUPLICATE 1
ACCESSION NUMBER: 2001169254 MEDLINE

DOCUMENT NUMBER: 21168388 PubMed ID: 11266844
TITLE: CFSE dye dilution mixed lymphocyte reactions quantify donor-specific alloreactive precursors in non-human primate **cardiac graft rejection.**
AUTHOR: Nitta Y; Nelson K; Andrews R G; Thomas R; Gaur L K; Allen M D
CORPORATE SOURCE: Division of Cardiothoracic Surgery, University of Washington, Seattle, Washington, USA.
CONTRACT NUMBER: AI-37747 (NIAID)
SOURCE: TRANSPLANTATION PROCEEDINGS, (2001 Feb-Mar) 33 (1-2) 326-9. Journal code: WE9; 0243532. ISSN: 0041-1345.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200106
ENTRY DATE: Entered STN: 20010702
Last Updated on STN: 20010702
Entered Medline: 20010628

L2 ANSWER 4 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 1
ACCESSION NUMBER: 2001:357489 BIOSIS
DOCUMENT NUMBER: PREV200100357489
TITLE: CFSE dye dilution mixed lymphocyte reactions quantify donor-specific alloreactive precursors in non-human primate **cardiac graft rejection.**
AUTHOR(S): Nitta, Y. (1); Nelson, K.; Andrews, R. G.; Thomas, R.; Gaur, L. K.; Allen, M. D.
CORPORATE SOURCE: (1) Molecular Biology Laboratories of the Puget Sound Blood Center, 921 Terry Ave, Seattle, WA, 98104 USA
SOURCE: Transplantation Proceedings, (February March, 2001) Vol. 33, No. 1-2, pp. 326-329. print.
Meeting Info.: XVIII International Congress of the Transplantation Society Rome, Italy August 29-September 01, 2000 Transplantation Society
. ISSN: 0041-1345.
DOCUMENT TYPE: Conference
LANGUAGE: English
SUMMARY LANGUAGE: English

L2 ANSWER 5 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 2001:249232 BIOSIS
DOCUMENT NUMBER: PREV200100249232
TITLE: Transplant coronary artery disease in pediatrics: Favorable outcome with medical therapy.
AUTHOR(S): Boucek, M. M. (1); Sondheimer, H. M. (1); Ivy, D. D. (1); Shaffer, E. M. (1); Mashburn, C.; Ripe, D. W.; Gilbert, D. J.; Kyle, T. E.; Campbell, D. N. (1); Pietra, B. (1)
CORPORATE SOURCE: (1) University of Colorado Health Sciences Center, Denver, CO USA
SOURCE: Journal of Heart and Lung Transplantation, (February, 2001) Vol. 20, No. 2, pp. 261. print.
Meeting Info.: Twenty-First Annual Meeting and Scientific Sessions of the International Society for Heart and Lung Transplantation Vancouver, Canada April 25-28, 2001 International Society for Heart and Lung Transplantation
. ISSN: 1053-2498.
DOCUMENT TYPE: Conference
LANGUAGE: English
SUMMARY LANGUAGE: English

L2 ANSWER 6 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS

ACCESSION NUMBER: 2001:249371 BIOSIS
DOCUMENT NUMBER: PREV200100249371
TITLE: Diabetes affects long-term survival after heart transplantation.
AUTHOR(S): Czerny, M. (1); Sahin, V. (1); Zuckermann, A. (1); Zimpfer, D. (1); Kilo, J. (1); Baumer, H. (1); Wolner, E. (1); Grimm, M. (1)
CORPORATE SOURCE: (1) University of Vienna, Vienna Austria
SOURCE: Journal of Heart and Lung Transplantation, (February, 2001) Vol. 20, No. 2, pp. 245. print.
Meeting Info.: Twenty-First Annual Meeting and Scientific Sessions of the International Society for Heart and Lung Transplantation Vancouver, Canada April 25-28, 2001 International Society for Heart and Lung Transplantation . ISSN: 1053-2498.
DOCUMENT TYPE: Conference
LANGUAGE: English
SUMMARY LANGUAGE: English

L2 ANSWER 7 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 2001:254157 BIOSIS
DOCUMENT NUMBER: PREV200100254157
TITLE: Is outcome after heart transplantation influenced by ethnicity? A comparison of African Americans versus Caucasians.
AUTHOR(S): Pamboukian, S. V. (1); Heroux, A. (1); Bartlett, L. (1); Mcleod, M. (1); Meyer, P. (1); Winkel, E. (1); Kao, W. (1); Saltzberg, M. (1); Costanzo, M. R. (1)
CORPORATE SOURCE: (1) Rush Presbyterian St. Luke's Medical Center, Chicago, IL USA
SOURCE: Journal of Heart and Lung Transplantation, (February, 2001) Vol. 20, No. 2, pp. 238. print.
Meeting Info.: Twenty-First Annual Meeting and Scientific Sessions of the International Society for Heart and Lung Transplantation Vancouver, Canada April 25-28, 2001 International Society for Heart and Lung Transplantation . ISSN: 1053-2498.
DOCUMENT TYPE: Conference
LANGUAGE: English
SUMMARY LANGUAGE: English

L2 ANSWER 8 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 2001:253356 BIOSIS
DOCUMENT NUMBER: PREV200100253356
TITLE: Cyclosporine does not enhance the development of chronic rejection. Experimental study in a rat cardiac transplant model.
AUTHOR(S): Richter, M. (1); Schramm, D. (1); Richter, H. R. (1); Olbrich, H. G. (1)
CORPORATE SOURCE: (1) Experimental Heart Transplant Group Frankfurt, Parthenstein Germany
SOURCE: Journal of Heart and Lung Transplantation, (February, 2001) Vol. 20, No. 2, pp. 234. print.
Meeting Info.: Twenty-First Annual Meeting and Scientific Sessions of the International Society for Heart and Lung Transplantation Vancouver, Canada April 25-28, 2001 International Society for Heart and Lung Transplantation . ISSN: 1053-2498.
DOCUMENT TYPE: Conference
LANGUAGE: English
SUMMARY LANGUAGE: English

L2 ANSWER 9 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 2001:253354 BIOSIS
DOCUMENT NUMBER: PREV200100253354
TITLE: Prevention of accelerated rejection and prolonged survival in sensitized rats with cyclophosphamide therapy.
AUTHOR(S): Ma, N. (1); Szabolcs, M. (1); John, R. (1); Weinberg, A. (1); Itescu, S. (1); Edwards, N. (1)
CORPORATE SOURCE: (1) Columbia University, New York, NY USA
SOURCE: Journal of Heart and Lung Transplantation, (February, 2001) Vol. 20, No. 2, pp. 233-234. print.
Meeting Info.: Twenty-First Annual Meeting and Scientific Sessions of the International Society for Heart and Lung Transplantation Vancouver, Canada April 25-28, 2001 International Society for Heart and Lung Transplantation
. ISSN: 1053-2498.
DOCUMENT TYPE: Conference
LANGUAGE: English
SUMMARY LANGUAGE: English

L2 ANSWER 10 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 2001:253353 BIOSIS
DOCUMENT NUMBER: PREV200100253353
TITLE: Improvement of acute renal dysfunction (ARD) in heart transplant (Tx) patients (PTS) during calcineurin inhibitor (CNI) 'holiday' without rejection under anti-CD25 monoclonal antibody (mAb) coverage.
AUTHOR(S): Cantarovich, M. (1); Giannetti, N. (1); Cyr, E. (1); Chartier, R. (1); Cecere, R. (1)
CORPORATE SOURCE: (1) McGill University Health Center, Montreal, PQ Canada
SOURCE: Journal of Heart and Lung Transplantation, (February, 2001) Vol. 20, No. 2, pp. 233. print.
Meeting Info.: Twenty-First Annual Meeting and Scientific Sessions of the International Society for Heart and Lung Transplantation Vancouver, Canada April 25-28, 2001 International Society for Heart and Lung Transplantation
. ISSN: 1053-2498.
DOCUMENT TYPE: Conference
LANGUAGE: English
SUMMARY LANGUAGE: English

L2 ANSWER 11 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 2001:253348 BIOSIS
DOCUMENT NUMBER: PREV200100253348
TITLE: FK506 vs. cyclosporin: Pathologic findings in 1067 endomyocardial biopsies.
AUTHOR(S): Gajjar, N. A. (1); Kobashigawa, J. (1); Laks, H. (1); Fishbein, M. (1)
CORPORATE SOURCE: (1) University of California at Los Angeles Medical Center, Los Angeles, CA USA
SOURCE: Journal of Heart and Lung Transplantation, (February, 2001) Vol. 20, No. 2, pp. 229. print.
Meeting Info.: Twenty-First Annual Meeting and Scientific Sessions of the International Society for Heart and Lung Transplantation Vancouver, Canada April 25-28, 2001 International Society for Heart and Lung Transplantation
. ISSN: 1053-2498.
DOCUMENT TYPE: Conference
LANGUAGE: English
SUMMARY LANGUAGE: English

L2 ANSWER 12 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 2001:255235 BIOSIS

DOCUMENT NUMBER: PREV200100255235
TITLE: Sudden, unexpected death in cardiac transplant recipients: An autopsy study.
AUTHOR(S): Blakey, J. D. (1); Kobashigawa, J. (1); Laks, H. (1); Espejo, M. L. (1); Fishbein, M. (1)
CORPORATE SOURCE: (1) University of California at Los Angeles Medical Center, Los Angeles, CA USA
SOURCE: Journal of Heart and Lung Transplantation, (February, 2001) Vol. 20, No. 2, pp. 229. print.
Meeting Info.: Twenty-First Annual Meeting and Scientific Sessions of the International Society for Heart and Lung Transplantation Vancouver, Canada April 25-28, 2001 International Society for Heart and Lung Transplantation . ISSN: 1053-2498.
DOCUMENT TYPE: Conference
LANGUAGE: English
SUMMARY LANGUAGE: English

L2 ANSWER 13 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 2001:253347 BIOSIS
DOCUMENT NUMBER: PREV200100253347
TITLE: HMG-CoA reductase inhibitor Cerivastatin prolonged rat cardiac allograft survival by blocking intercellular signals.
AUTHOR(S): Horimoto, H. (1); Nakai, Y. (1); Nakahara, K. (1); Mieno, S. (1); Sasaki, S. (1)
CORPORATE SOURCE: (1) Osaka Medical College, Takatsuki, Osaka Japan
SOURCE: Journal of Heart and Lung Transplantation, (February, 2001) Vol. 20, No. 2, pp. 227. print.
Meeting Info.: Twenty-First Annual Meeting and Scientific Sessions of the International Society for Heart and Lung Transplantation Vancouver, Canada April 25-28, 2001 International Society for Heart and Lung Transplantation . ISSN: 1053-2498.
DOCUMENT TYPE: Conference
LANGUAGE: English
SUMMARY LANGUAGE: English

L2 ANSWER 14 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 2001:249432 BIOSIS
DOCUMENT NUMBER: PREV200100249432
TITLE: Older recipient age is associated with reduced alloreactivity and graft rejection after cardiac transplantation.
AUTHOR(S): John, R. (1); Lietz, K. (1); Schuster, M. (1); Mancini, D. (1); Naka, Y. (1); Oz, M. (1); Edwards, N. (1); Itescu, S. (1)
CORPORATE SOURCE: (1) Columbia University, New York, NY USA
SOURCE: Journal of Heart and Lung Transplantation, (February, 2001) Vol. 20, No. 2, pp. 212. print.
Meeting Info.: Twenty-First Annual Meeting and Scientific Sessions of the International Society for Heart and Lung Transplantation Vancouver, Canada April 25-28, 2001 International Society for Heart and Lung Transplantation . ISSN: 1053-2498.
DOCUMENT TYPE: Conference
LANGUAGE: English
SUMMARY LANGUAGE: English

L2 ANSWER 15 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 2001:249178 BIOSIS
DOCUMENT NUMBER: PREV200100249178

TITLE: Panel reactive antibody screening practices prior to heart transplantation.
AUTHOR(S): Betkowski, A. S. (1); Graff, R. (1); Chen, J. J. (1); Hauptman, P. J. (1)
CORPORATE SOURCE: (1) St. Louis University Health Sciences, Saint Louis, MO USA
SOURCE: Journal of Heart and Lung Transplantation, (February, 2001) Vol. 20, No. 2, pp. 205. print.
Meeting Info.: Twenty-First Annual Meeting and Scientific Sessions of the International Society for Heart and Lung Transplantation Vancouver, Canada April 25-28, 2001 International Society for Heart and Lung Transplantation . ISSN: 1053-2498.
DOCUMENT TYPE: Conference
LANGUAGE: English
SUMMARY LANGUAGE: English

L2 ANSWER 16 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 2001:249155 BIOSIS
DOCUMENT NUMBER: PREV200100249155
TITLE: Ten year experience of FK 506 for adult cardiac transplantation at a single institution.
AUTHOR(S): Sakai, T. (1); Kormos, R. L. (1); Mccurry, K. R. (1); Ristich, J. (1); Hattler, B. G. (1); Zenati, M. (1); Griffith, B. P. (1)
CORPORATE SOURCE: (1) University of Pittsburgh, Pittsburgh, PA USA
SOURCE: Journal of Heart and Lung Transplantation, (February, 2001) Vol. 20, No. 2, pp. 191-192. print.
Meeting Info.: Twenty-First Annual Meeting and Scientific Sessions of the International Society for Heart and Lung Transplantation Vancouver, Canada April 25-28, 2001 International Society for Heart and Lung Transplantation . ISSN: 1053-2498.
DOCUMENT TYPE: Conference
LANGUAGE: English
SUMMARY LANGUAGE: English

L2 ANSWER 17 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 2001:249153 BIOSIS
DOCUMENT NUMBER: PREV200100249153
TITLE: Tacrolimus/Mycophenolate Mofetil vs Cyclosporine/Mycophenolate Mofetil: Comparison of Mycophenolate Acid through levels and coronary vasomotor function.
AUTHOR(S): Groetzner, J. (1); Meiser, B. (1); Schirmer, J. (1); Schenk, S. S. (1); Scheidt, W. V. (1); Petrakopulo, V. (1); Weiss, M. (1); Klauss, V. (1); Stempfle, W. (1); Cremer, P. (1); Reichenspurner, H. (1); Reichart, B. (1)
CORPORATE SOURCE: (1) LMU Grosshadern, Munich Germany
SOURCE: Journal of Heart and Lung Transplantation, (February, 2001) Vol. 20, No. 2, pp. 191. print.
Meeting Info.: Twenty-First Annual Meeting and Scientific Sessions of the International Society for Heart and Lung Transplantation Vancouver, Canada April 25-28, 2001 International Society for Heart and Lung Transplantation . ISSN: 1053-2498.
DOCUMENT TYPE: Conference
LANGUAGE: English
SUMMARY LANGUAGE: English

L2 ANSWER 18 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 2001:255217 BIOSIS

DOCUMENT NUMBER: PREV200100255217
TITLE: Tc99m MCP-1 imaging of chronic rejection in rat cardiac allografts.
AUTHOR(S): Kown, M. H. (1); Blankenberg, F. G. (1); Strauss, H. W. (1); Hoyt, G. E. (1); Robbins, R. C. (1)
CORPORATE SOURCE: (1) Stanford University Medical School, Stanford, CA USA
SOURCE: Journal of Heart and Lung Transplantation, (February, 2001) Vol. 20, No. 2, pp. 186. print.
Meeting Info.: Twenty-First Annual Meeting and Scientific Sessions of the International Society for Heart and Lung Transplantation Vancouver, Canada April 25-28, 2001 International Society for Heart and Lung Transplantation . ISSN: 1053-2498.
DOCUMENT TYPE: Conference
LANGUAGE: English
SUMMARY LANGUAGE: English

L2 ANSWER 19 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 2001:255218 BIOSIS
DOCUMENT NUMBER: PREV200100255218
TITLE: Do vascular compartments differ in the development of chronic rejection.
AUTHOR(S): Richter, M. (1); Richter, H. R. (1); Olbrich, H. G. (1); Mohr, F. W.
CORPORATE SOURCE: (1) Experimental Heart Transplant Group Frankfurt, Parthenstein Germany
SOURCE: Journal of Heart and Lung Transplantation, (February, 2001) Vol. 20, No. 2, pp. 186. print.
Meeting Info.: Twenty-First Annual Meeting and Scientific Sessions of the International Society for Heart and Lung Transplantation Vancouver, Canada April 25-28, 2001 International Society for Heart and Lung Transplantation . ISSN: 1053-2498.
DOCUMENT TYPE: Conference
LANGUAGE: English
SUMMARY LANGUAGE: English

L2 ANSWER 20 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 2001:249135 BIOSIS
DOCUMENT NUMBER: PREV200100249135
TITLE: Increased risk of CMV infection in heart transplant patients on mycophenolate mofetil.
AUTHOR(S): Giesler, G. (1); Espejo, M. (1); Kubak, B. (1); Moriguchi, J. (1); Patel, J. (1); Laks, H. (1); Kobashigawa, J. A. (1)
CORPORATE SOURCE: (1) University of California at Los Angeles, Los Angeles, CA USA
SOURCE: Journal of Heart and Lung Transplantation, (February, 2001) Vol. 20, No. 2, pp. 178. print.
Meeting Info.: Twenty-First Annual Meeting and Scientific Sessions of the International Society for Heart and Lung Transplantation Vancouver, Canada April 25-28, 2001 International Society for Heart and Lung Transplantation . ISSN: 1053-2498.
DOCUMENT TYPE: Conference
LANGUAGE: English
SUMMARY LANGUAGE: English

L2 ANSWER 21 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 2001:249134 BIOSIS
DOCUMENT NUMBER: PREV200100249134
TITLE: Outcome of hepatitis C positive donors in cardiac transplant recipients in triple drug immunosuppression

(TDI.

AUTHOR(S): Tsai, F. (1); Marelli, D. (1); Laks, H. (1); Bresson, J. (1); Houston, E. (1); Friend, L. (1); Kobashigawa, J. (1); Lackey, S. (1); Camara, R. (1)

CORPORATE SOURCE: (1) UCLA, Los Angeles, CA USA

SOURCE: Journal of Heart and Lung Transplantation, (February, 2001) Vol. 20, No. 2, pp. 177-178. print.
Meeting Info.: Twenty-First Annual Meeting and Scientific Sessions of the International Society for Heart and Lung Transplantation Vancouver, Canada April 25-28, 2001 International Society for Heart and Lung Transplantation
. ISSN: 1053-2498.

DOCUMENT TYPE: Conference

LANGUAGE: English

SUMMARY LANGUAGE: English

L2 ANSWER 22 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS

ACCESSION NUMBER: 2001:129767 BIOSIS

DOCUMENT NUMBER: PREV200100129767

TITLE: Eradication of microsporidiosis after lowering immunosuppression, in a heart-lung transplant recipient: A case report.

AUTHOR(S): Conteas, Chris (1); Vachhani, Atul (1); Pruthi, Jatinder (1)

CORPORATE SOURCE: (1) Dept of Gastroenterology, Kaiser Permanente Medical Center, Los Angeles, CA USA

SOURCE: American Journal of Gastroenterology, (September, 2000) Vol. 95, No. 9, pp. 2568. print.
Meeting Info.: 65th Annual Scientific Meeting of the American College of Gastroenterology New York, New York, UK October 13-18, 2000
ISSN: 0002-9270.

DOCUMENT TYPE: Conference

LANGUAGE: English

SUMMARY LANGUAGE: English

L2 ANSWER 23 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS

ACCESSION NUMBER: 2000:301866 BIOSIS

DOCUMENT NUMBER: PREV200000301866

TITLE: Neoral use in the cardiac transplant recipient.

AUTHOR(S): Valantine, H.

SOURCE: Transplantation Proceedings, (May, 2000) Vol. 32, No. 3A, pp. 27S-44S. print.
ISSN: 0041-1345.

DOCUMENT TYPE: General Review

LANGUAGE: English

SUMMARY LANGUAGE: English

L2 ANSWER 24 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS

ACCESSION NUMBER: 2001:105913 BIOSIS

DOCUMENT NUMBER: PREV200100105913

TITLE: Trends of transplant associated coronary artery disease and survival in a large heart transplant population.

AUTHOR(S): Kavarana, Minoo N. (1); Sinha, Prashant (1); Williams, Mathew R. (1); Barbone, Alessandro (1); Naka, Yoshifumi (1); Mancini, Donna M. (1); Edwards, Niloo M. (1)

CORPORATE SOURCE: (1) Columbia Univ, New York, NY USA

SOURCE: Circulation, (October 31, 2000) Vol. 102, No. 18 Supplement, pp. II.374. print.
Meeting Info.: Abstracts from Scientific Sessions 2000 New Orleans, Louisiana, USA November 12-15, 2000
ISSN: 0009-7322.

DOCUMENT TYPE: Conference
LANGUAGE: English
SUMMARY LANGUAGE: English

L2 ANSWER 25 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 2000:52576 BIOSIS
DOCUMENT NUMBER: PREV200000052576
TITLE: Psychiatric disorders and outcome following cardiac transplantation.
AUTHOR(S): Skotzko, Christine E. (1); Rudis, Rinat; Kobashigawa, Jon A.; Laks, Hillel
CORPORATE SOURCE: (1) University of Maryland Medicine, VAMHCS: Baltimore, University of Maryland School of Medicine, 10 N. Greene Street, Baltimore, MD USA
SOURCE: Journal of Heart and Lung Transplantation, (Oct., 1999) Vol. 18, No. 10, pp. 952-956.
ISSN: 1053-2498.
DOCUMENT TYPE: Article
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Background: Psychosocial factors are frequently included in determining candidacy for cardiac transplantation. Although there are some data demonstrating a link between preoperative psychosocial status and postoperative outcome, a definitive answer has yet to be reached. Methods: We studied 107 consecutive patients, transplanted from January 1990 to September 1991, with a retrospective review of pretransplant psychiatric evaluations to define a DSM III-R Axis I diagnosis. The medical outcome data included 1-year survival, rehospitalizations, infections, and rejection episodes, gathered from the transplant database. Results: There were no discernable differences between the groups with (n = 25) and without (n = 82) a DSM III-R Axis I psychiatric disorder prior to transplant in the evaluation of demographic data and medical outcome variables. Conclusion: These data demonstrate that individuals with a history of psychiatric disorder who are carefully selected for compliance with medicalcare display no inherent difference from individuals without psychiatric disorder in medical outcome and survival at 1 year after cardiac transplantation.

L2 ANSWER 26 OF 95 MEDLINE DUPLICATE 2
ACCESSION NUMBER: 1999456011 MEDLINE
DOCUMENT NUMBER: 99456011 PubMed ID: 10528743
TITLE: Inducible nitric oxide synthase promotes cytokine expression in cardiac allografts but is not required for efficient rejection.
AUTHOR: Mannon R B; Roberts K; Ruiz P; Laubach V; Coffman T M
CORPORATE SOURCE: Department of Medicine, Duke University Medical Center, Durham, North Carolina 27710, USA..
roslyn.mannon@acpub.duke.edu
CONTRACT NUMBER: 1 K08 AI01389-01 (NIAID)
PO1-DK38103 (NIDDK)
SOURCE: JOURNAL OF HEART AND LUNG TRANSPLANTATION, (1999 Sep) 18 (9) 819-27.
Journal code: A0Q; 9102703. ISSN: 1053-2498.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199912
ENTRY DATE: Entered STN: 20000113
Last Updated on STN: 20000113
Entered Medline: 19991201
AB BACKGROUND: Inducible nitric oxide synthase (iNOS) is enhanced during

acute rejection. Pharmacologic inhibition of nitric oxide synthase (NOS) activity has had variable effects on graft survival in a number of animal models. To further characterize the requirement and effects of iNOS during acute allograft rejection, we examined rejection responses of mice completely deficient of iNOS. METHODS: Heterotopic cardiac allografts were performed using wild-type and iNOS deficient mice (iNOS[-/-]) as recipients. Graft survival was determined by abdominal palpation. At days 3 and 7 following transplantation, grafts were harvested and analyzed histologically. Cytokine messenger RNA (mRNA) expression was measured by ribonuclease protection assay. RESULTS: Mean survival time of cardiac allografts did not differ between wild-type (18 +/- 3 days) and iNOS(-/-) recipients (16 +/- 2 days). At 3 days, findings of moderate acute rejection were seen in both recipients groups, although modestly reduced in iNOS(-/ -) mice. By 7 days, allografts in both groups demonstrated severe rejection. Within grafts at day 3, there was a 3-fold reduction in IL-1beta expression and a 4-fold reduction in IL-1RA in iNOS(-/-) recipients (p = 0.03 andp = 0.04, respectively) compared to wild-type recipients. Expression of other proinflammatory cytokines was detected in the grafts from both recipients, but was not significantly different. Finally, rejection responses to iNOS(-/-) cardiac allografts were nearly identical to wild-type allografts. CONCLUSIONS: Rejection of cardiac allografts by iNOS(-/-) mice occurs in a similar fashion to wild-type recipients, with extensive inflammation and proinflammatory cytokine production. While iNOS may play a role in cytokine induction by macrophages, these studies suggest that iNOS is not required for efficient **cardiac graft rejection**.

L2 ANSWER 27 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 2
ACCESSION NUMBER: 2000:3236 BIOSIS
DOCUMENT NUMBER: PREV200000003236
TITLE: Inducible nitric oxide synthase promotes cytokine expression in cardiac allografts but is not required for efficient rejection.
AUTHOR(S): Mannon, Roslyn B. (1); Roberts, Karen; Ruiz, Philip; Laubach, Victor; Coffman, Thomas M.
CORPORATE SOURCE: (1) Nephrology Section (111I), VA Medical Center, 508 Fulton Street, Building 6 (a) Nephrology Section (111I), VA Medical Center, 508 Fulton Street, Building 6 USA
SOURCE: Journal of Heart and Lung Transplantation, (Sept., 1999) Vol. 18, No. 9, pp. 819-827. ISSN: 1053-2498.
DOCUMENT TYPE: Article
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Background: Inducible nitric oxide synthase (iNOS) is enhanced during acute rejection. Pharmacologic inhibition of nitric oxide synthase (NOS) activity has had variable effects on graft survival in a number of animal models. To further characterize the requirement and effects of iNOS during acute allograft rejection, we examined rejection responses of mice completely deficient of iNOS. Methods: Heterotopic cardiac allografts were performed using wild-type and iNOS deficient mice (iNOS(-/-)) as recipients. Graft survival was determined by abdominal palpation. At days 3 and 7 following transplantation, grafts were harvested and analyzed histologically. Cytokine messenger RNA (mRNA) expression was measured by ribonuclease protection assay. Results: Mean survival time of cardiac allografts did not differ between wild-type (18 +- 3 days) and iNOS(-/-) recipients (16 +- 2 days). At 3 days, findings of moderate acute rejection were seen in both recipients groups, although modestly reduced i n iNOS(-/-) mice. By 7 days, allografts in both groups demonstrated severe rejection. Within grafts at day 3, there was a 3-fold reduction in IL-1beta expression and a 4-fold reduction in IL-1RA in iNOS(-/-) recipients (p = 0.03 and p = 0.04, respectively) compared to wild-type

recipients. Expression of other proinflammatory cytokines was detected in the grafts from both recipients, but was not significantly different. Finally, rejection responses to iNOS(-/-) cardiac allografts were nearly identical to wild-type allografts. Conclusions: Rejection of cardiac allografts by iNOS(-/-) mice occurs in a similar fashion to wild-type recipients, with extensive inflammation and proinflammatory cytokine production. While iNOS may play a role in cytokine induction by macrophages, these studies suggest that iNOS is not required for efficient **cardiac graft rejection**.

L2 ANSWER 28 OF 95 MEDLINE
ACCESSION NUMBER: 2001381787 MEDLINE
DOCUMENT NUMBER: 21239226 PubMed ID: 11341612
TITLE: Rejection pattern of simultaneously transplanted cardiac and skeletal muscle grafts in a rat model.
AUTHOR: Sekosan M; Blanchard J; Massad M G; Benedetti E
CORPORATE SOURCE: Department of Surgery, The University of Illinois at Chicago, 60612, USA.
SOURCE: Int J Surg Investig, (1999) 1 (3) 237-43.
Journal code: D06; 100965774. ISSN: 1028-5229.
PUB. COUNTRY: Unknown
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200107
ENTRY DATE: Entered STN: 20010709
Last Updated on STN: 20010709
Entered Medline: 20010705

AB BACKGROUND: We studied the correlation of cardiac and skeletal muscle allograft rejection in a rat model to assess the feasibility of using biopsies from simultaneously transplanted skeletal muscle for surveillance of **cardiac graft rejection**. METHODS: Thirty Lewis rats (RT1l)) underwent simultaneous heterotopic heart and cutaneous maximus flap (HHCM) allotransplant. Seven recipient rats (control) received syngeneic HHCM grafts from Lewis donors while the remaining 23 (study group) received HHCM grafts from Brown Norway (RT1n) donors. Control rats were sacrificed after 7 days while rats in the study group were serially sacrificed at days 1-7 after transplantation. No immunosuppression was given. The tissue sections from the HHCM grafts were assessed for acute rejection based on the grading system adopted by the International Society for Heart and Lung Transplantation. RESULTS: As expected, all the control rats had no evidence of rejection. One study animal developed an infection in the skeletal muscle allograft and was excluded. Two study animals had no evidence of rejection when sacrificed 1 day after transplant. The remaining 20 rats developed acute cellular rejection in their graft(s). Upon comparison of acute cellular rejection between the heterotopic heart and the cutaneous maximus flap grafts, rejection correlated grade for grade in 75% (15 of 20 rats). All five rats that did not have identical grades of rejection had mild rejection (grades IA, IB and II). Presence or absence of rejection, therefore, correlated in 20/22 rats: 15/20 rats with cardiac rejection and 2/2 rats without cardiac rejection. CONCLUSION: Cardiac and skeletal muscle allografts have similar pattern of rejection with little grade to grade variability. The clinical implications for surveillance of cardiac rejection warrants further investigation.

L2 ANSWER 29 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1999:199252 BIOSIS
DOCUMENT NUMBER: PREV199900199252
TITLE: Immunosuppressive effect of combination schedules of brequinar with leflunomide or tacrolimus on rat cardiac allotransplantation.

AUTHOR(S): Antoniou, Efstathios A. (1); Deroover, Arnaud; Howie, Alexander J.; Chondros, Kostas; McMaster, Paul; D'Silva, Milbhor

CORPORATE SOURCE: (1) Transplantation Microsurgery Laboratory, Liver Research Laboratories, Clinical Research Block, Queen Elizabeth Hospital and Medical Center, Edgbaston, Birmingham, B15 2TH UK

SOURCE: Microsurgery, (1999) Vol. 19, No. 2, pp. 98-102. ISSN: 0738-1085.

DOCUMENT TYPE: Article

LANGUAGE: English

AB Drug toxicity is one of the major problems in clinical immunosuppression. Combining two immunosuppressants in low or ineffective doses is an attractive strategy if it helps to reduce drug-related toxicity. We examined the immunosuppressive efficacy of brequinar (BQR) in combination with leflunomide (Lef) or tacrolimus (FK) in a heterotopic rat cardiac allotransplantation model. Abdominal heterotopic heart grafts (DA X LEW) were immunosuppressed from the time of transplantation and continued until the ninth posttransplant day (POD) in experiments examining prophylaxis of rejection treatment (PRT). In a separate series of experiments designed to test rescue treatment (RT), immunosuppression was begun on POD 4 and continued for 10 days; transplanted rats were sacrificed the following day intentionally. Cardiac rejection was monitored by palpation and documented by light microscopy. Immunosuppressive drugs (BQR 3 mg/kg and 12 mg/kg; BQR 3 mg/kg + Lef 5 mg/kg; BQR 3 mg/kg + FK 0.5 mg/kg) were given orally by gavage; thrice weekly according to the monotherapy or dual-therapy dosing protocol. Median survival time of the cardiac graft for controls (no treatment) was 5 days. BQR monotherapy 3 mg/kg (low dose) improved graft survival (P = 0.003); graft histology showed moderate acute rejection. BQR monotherapy 12 mg/kg (therapeutic dose) application in the PRT or RT treatment arms of the study design resulted in aorticgraft ruptures and clinical toxicity in each treatment arm due to overimmunosuppression; normal graft morphology was maintained. Successful rescue of rejecting grafts was histologically documented. Combining BQR with Lef or FK in the PRT protocol showed prolonged graft survival in both drug combination groups (median survival time, 14 days; P = 0.009 and 0.014, respectively). Using an identical combination protocol for RT, all grafts achieved a 14-day graft survival; cardiac histology showed reversible moderate acute rejection. BQR given in the presence of Lef or FK not only prevented acute rejection but intercepted it so long as it was administered; grafts were rejected within 4 days of stopping immunosuppression in the PRT study. These combinations using low or subtherapeutic doses may be important for controlling transplant rejection and rescuing ongoing graft rejection. The need for continuing treatment in this strongly allogeneic model is highlighted.

L2 ANSWER 30 OF 95 MEDLINE DUPLICATE 3

ACCESSION NUMBER: 1998372173 MEDLINE

DOCUMENT NUMBER: 98372173 PubMed ID: 9708468

TITLE: Elevated serum concentrations of cardiac troponin T in acute allograft rejection after human heart transplantation.

AUTHOR: Dengler T J; Zimmermann R; Braun K; Muller-Bardorff M; Zehelein J; Sack F U; Schnabel P A; Kubler W; Katus H A

CORPORATE SOURCE: Department of Cardiology, University of Heidelberg, Germany.. thomas.dengler@yale.edu

SOURCE: JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY, (1998 Aug) 32 (2) 405-12. Journal code: H50; 8301365. ISSN: 0735-1097.

PUB. COUNTRY: United States

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199809
ENTRY DATE: Entered STN: 19980910
Last Updated on STN: 19990129
Entered Medline: 19980901

AB OBJECTIVES: This study evaluates the concept and diagnostic efficacy of using serum troponin T for the detection of **cardiac graft rejection**. BACKGROUND: Cardiac troponin T is a cardiospecific myofibrillar protein, which is only detectable in the circulation after cardiac myocyte damage. It might be expected to be released during acute heart allograft rejection, allowing noninvasive rejection diagnosis. METHODS: In 35 control subjects and in 422 samples from 95 clinically unremarkable heart allograft recipients more than 3 months postoperatively, troponin T serum concentrations were compared to the histological grade of acute graft rejection in concurrent endomyocardial biopsies. RESULTS: Mean troponin T serum concentrations were identical in control subjects (23.2 +/- 1.4 ng/liter) and in heart transplant recipients without graft rejection (International Society for Heart and Lung Transplantation [ISHLT] grade 0; 22.4 +/- 1.7 ng/liter). Mean troponin T concentrations increased in parallel with the severity of graft rejection (ISHLT grade 1: 27.8 +/- 1.8 ng/liter; grade 2: 33.2 +/- 2.7 ng/liter; grade 3A: 54.6 +/- 6.5 ng/liter; grade 3B and 4: 105.4 +/- 53.7 ng/liter; $p < 0.001$ for grades 3 and 4 vs. grades 0 and 1). The proportion of positive samples also increased in parallel with rejection severity, reaching 100% in rejections of grade 3B and 4. Sensitivity and specificity for the detection of significant graft rejection (ISHLT grade 3/4) were 80.4% and 61.8%, respectively. The negative predictive value was most remarkable with 96.2%. Intraindividual longitudinal analysis of troponin T levels and biopsy results in 15 patients during long-term follow-up confirmed these findings. CONCLUSIONS: The present data demonstrate that acute allograft rejection after human heart transplantation is often associated with increased serum concentrations of troponin T. All cases of serious forms of graft rejection would have been detected before the development of clinical symptoms. Measurement of troponin T levels may become a useful ancillary parameter for noninvasive rejection diagnosis, being most valuable in the exclusion of severe **cardiac graft rejection**.

L2 ANSWER 31 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 3
ACCESSION NUMBER: 1998:429732 BIOSIS
DOCUMENT NUMBER: PREV199800429732
TITLE: Elevated serum concentrations of cardiac troponin T in acute allograft rejection after human heart transplantation.
AUTHOR(S): Dengler, Thomas J. (1); Zimmermann, Rainer; Braun, Klaus; Mueller-Bardorff, Margit; Zehelein, Joerg; Sack, Falk-Udo; Schnabel, Philipp A.; Kuebler, Wolfgang; Katus, Hugo A.
CORPORATE SOURCE: (1) Boyer Cent. Molecular Med., Yale Sch. Med., 295 Congress Ave., Room No. 449, New Haven, CT 06510 USA
SOURCE: Journal of the American College of Cardiology, (Aug., 1998) Vol. 32, No. 2, pp. 405-412.
ISSN: 0735-1097.
DOCUMENT TYPE: Article
LANGUAGE: English

AB Objectives. This study evaluates the concept and diagnostic efficacy of using serum troponin T for the detection of **cardiac graft rejection**. Background. Cardiac troponin T is a cardiospecific myofibrillar protein, which is only detectable in the circulation after cardiac myocyte damage. It might be expected to be released during acute heart allograft rejection, allowing noninvasive rejection diagnosis. Methods. In 35 control subjects and in 422 samples from 95 clinically unremarkable heart allograft recipients more than 3

months postoperatively, troponin T serum concentrations were compared to the histological grade of acute graft rejection in concurrent endomyocardial biopsies. Results. Mean troponin T serum concentrations were identical in control subjects (23.2 +- 1.4 ng/liter) and in heart transplant recipients without graft rejection (International Society for Heart and Lung Transplantation (ISHLT) grade 0; 22.4 +- 1.7 ng/liter). Mean troponin T concentrations increased in parallel with the severity of graft rejection (ISHLT grade 1: 27.8 +- 1.8 ng/liter, grade 2: 33.2 +- 2.7 ng/liter, grade 3A: 54.6 +- 6.5 ng/liter, grade 3B and 4: 105.4 +- 53.7 ng/liter, $p < 0.001$ for grades 3 and 4 vs. grades 0 and 1). The proportion of positive samples also increased in parallel with rejection severity, reaching 100% in rejections of grade 3B and 4. Sensitivity and specificity for the detection of significant graft rejection (ISHLT grade 3/4) were 80.4% and 61.8%, respectively. The negative predictive value was most remarkable with 96.2%. Intraindividual longitudinal analysis of troponin T levels and biopsy results in 15 patients during long-term follow-up confirmed these findings. Conclusions. The present data demonstrate that acute allograft rejection after human heart transplantation is often associated with increased serum concentrations of troponin T. All cases of serious forms of graft rejection would have been detected before the development of clinical symptoms. Measurement of troponin T levels may become a useful ancillary parameter for noninvasive rejection diagnosis, being most valuable in the exclusion of severe **cardiac graft rejection**.

L2 ANSWER 32 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1998:117308 BIOSIS
DOCUMENT NUMBER: PREV199800117308
TITLE: The role of gender in heart transplantation.
AUTHOR(S): Prendergast, Thomas W. (1); Furukawa, Satoshi; Beyer, A. James, III; Browne, Barry J.; Eisen, Howard J.; Jeevanandam, Valluvan
CORPORATE SOURCE: (1) Division Cardiothoracic Surgery, Kansas Univ. Med. Cent., 3901 Rainbow Blvd., Kansas City, KS 66160 USA
SOURCE: Annals of Thoracic Surgery, (Jan., 1998) Vol. 65, No. 1, pp. 88-94.
ISSN: 0003-4975.
DOCUMENT TYPE: Article
LANGUAGE: English
AB Background. The effect of donor and recipient gender on the outcome of heart transplantation (HT) remains uncertain. Methods. One hundred seventy-four patients who underwent HT were divided into four groups according to donor and recipient gender. Group A consisted of 81 men who received male donor hearts, group B of 18 women who received female donor hearts, group C of 21 women who received male donor hearts, and group D of 54 men who received female donor hearts. All patients were treated by the same group of surgeons according to standard HT protocols. Comparisons were made between groups with regard to short- and long-term outcomes. Results. Donor gender and recipient gender did not affect outcomes significantly. Overall, donor-recipient gender mismatching significantly increased the number of rejection episodes and reduced creatinine clearance, survival, and censored survival in the first year after HT ($p < 0.05$). More specifically, among female recipients, donor-recipient gender mismatching significantly increased the number of rejection episodes and decreased creatinine clearance in the first year after HT ($p < 0.05$); among male recipients, donor-recipient gender mismatching significantly reduced 1-year survival and censored survival to date after HT ($p < 0.05$). Conclusions. Donor-recipient gender matching plays a significant role in determining HT outcomes.

L2 ANSWER 33 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1998:89629 BIOSIS

DOCUMENT NUMBER: PREV199800089629
TITLE: Cardiac xenotransplantation.
AUTHOR(S): Disesa, Verdi J. (1)
CORPORATE SOURCE: (1) Dep. Cardiothoracic Surgery, Allegheny Univ. Hosp., MCP, 3300 Henry Ave., Philadelphia, PA 19129 USA
SOURCE: Annals of Thoracic Surgery, (Dec., 1997) Vol. 64, No. 6, pp. 1858-1865.
ISSN: 0003-4975.
DOCUMENT TYPE: General Review
LANGUAGE: English

AB Heart failure is an important medical and public health problem. Although medical therapy is effective for many people, the only definitive therapy is heart transplantation, which is limited severely by the number of donors. Mechanical devices presently are used as "bridges" to transplantation. Their widespread use may solve the donor shortage problem, but at present, mechanical devices are limited by problems related to blood clotting, power supply, and foreign body infection. Cardiac xenotransplantation using animal donors is a potential biologic solution to the donor organ shortage. The immune response, consisting of hyperacute rejection, acute vascular rejection, and cellular rejection, currently prevents clinical xenotransplantation. Advances in the solution of these problems have been made using conventional immunosuppressive drugs and newer agents whose use is based on an understanding of important steps in xenoimmunity. The most exciting approaches use tools of molecular biology to create genetically engineered donors and to induce states of donor and recipient bone marrow chimerism and tolerance in xenogeneic organ recipients. The successful future strategy may use a combination of a genetically engineered donor and a chimeric recipient with or without nonspecific immunosuppressive drugs.

L2 ANSWER 34 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1998:29298 BIOSIS
DOCUMENT NUMBER: PREV199800029298
TITLE: Routine surveillance endomyocardial biopsy: Late rejection after heart transplantation.
AUTHOR(S): Heimansohn, David A. (1); Robinson, Robert J.; Paris, John M., III; Matheny, Robert G.; Bogdon, Joanne; Shaar, Carl J.
CORPORATE SOURCE: (1) Dep. Cardiovasc./Thoracic Surg., St. Vincent Hosp. Health Care Cent., 8333 Naab Rd., Suite 300, Indianapolis, IN 46260 USA
SOURCE: Annals of Thoracic Surgery, (Nov., 1997) Vol. 64, No. 5, pp. 1231-1236.
ISSN: 0003-4975.
DOCUMENT TYPE: Article
LANGUAGE: English

AB Background. Transplant programs use routine surveillance endomyocardial biopsies (RSEMB), which are performed at preset intervals to diagnose cardiac rejection. This retrospective study determined the incidence of graft rejection detected by RSEMB. Methods. The records of 95 patients who underwent heart transplantation between 1987 and 1995 were reviewed. Rejection incidence was recorded for 80 patients who survived at least 30 days, with a mean follow-up of 35 months. Results. One thousand five hundred sixteen total biopsies were performed; 1,170 were RSEMB. Four hundred seventy-five total rejection episodes occurred and 269 (56%) were diagnosed by RSEMB. Two distinct patient groups were identified. The majority (70 patients), had a decline in the incidence of rejection and no rejection episodes were identified by RSEMB after 36 months. In contrast, the high rejection group (10 patients) had a significantly higher ongoing rejection rate (p ltoreq 0.04 to p ltoreq 0.001) throughout their postoperative course up to 72 months. Conclusions. The majority of our transplant patients demonstrate a decrease in rejection with time and do not require RSEMB beyond 30 months. We identified a group of patients who

exhibited a higher rate of rejection and need continued RSEMB.

L2 ANSWER 35 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1998:43642 BIOSIS
DOCUMENT NUMBER: PREV199800043642
TITLE: Causes of late failure after heart transplantation: A ten-year survey.
AUTHOR(S): Gallo, Pietro (1); Agozzino, Lucio; Angelini, Annalisa; Arbustini, Eloisa; Bartoloni, Giovanni; Bernucci, Paola; Bonacina, Edgardo; Bosman, Cesare; Catani, Gualtiero; Di Gioia, Cira; Giordana, Carla; Leone, Ornella; Motta, Teresio; Pucci, Angela; Rocco, Maurizio
CORPORATE SOURCE: (1) Dip. Med. Sperimentale Patol., Policlin. Umberto I, Viale Regina Elena 324, 00161 Rome Italy
SOURCE: Journal of Heart and Lung Transplantation, (Nov., 1997) Vol. 16, No. 11, pp. 1113-1121. ISSN: 1053-2498.
DOCUMENT TYPE: Article
LANGUAGE: English
AB Background: Little is known about the causes of death of heart transplant recipients who survive long-term. Methods: The pathologic and clinical records of 97 patients who underwent hearttransplantation in Italy from 1985 to 1995 and died (85 of 97) or underwent retransplantation (12 of 97) at least 2 years after transplantation were surveyed. Graft failures were classified as late (occurring between 2 and 5 years after transplantation) and belated (more than 5 years). Results: Graft vasculopathy was the single most common cause of death (40.0%) and the only cause of late retransplantation. Tumors ranked second (23.5% of deaths), but the expected non-Hodgkin's lymphomas and Kaposi's sarcoma were accompanied by a high number of lung cancers (especially metastasizing adenocarcinomas). They were followed by the emergence or recurrence of pretransplantation diseases (9.4%), fatal infections (exclusively bacterial) (4.7%), the development of transmissible diseases (viral hepatitis and acquired immunodeficiency syndrome, 4.7%), and late acute rejection (2.3%). The distribution of failures differed in the late and belated periods: death and organ loss proportions for graft vasculopathy, respectively, fell and rose from the late to the belated period; some types of malignancy and fatal acute rejection were never observed in the belated period, whereas the emergence of pretransplantation diseases prevailed in the belated period. Graft vasculopathy was more frequent and tumors were less frequent among patients undergoing transplantation for ischemic heart disease. Conclusions: The reasons why heart transplant recipients die or undergo retransplantation, respectively, in the late and belated periods slightly differ from one another and are widely different than in short-term survivors.

L2 ANSWER 36 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1997:396699 BIOSIS
DOCUMENT NUMBER: PREV199799695902
TITLE: Immunosuppressive and anti-inflammatory effects of phenolic nortriterpenoid, demethylzeylasteral, from Tripterygium wilfordii.
AUTHOR(S): Tamaki, Tohru (1); Morota, Takashi; Kawamura, Hideki; Maruyama, Hirofumi; Kaneko, Atsushi; Nunome, Shinyu; Komatsu, Yasuhiro; Qin, Wan-Zhang; Yang, Bing-Hui; Kawamura, Akio (1)
CORPORATE SOURCE: (1) Res. Inst. Artifical Organ, Transplantation and Gene Therapy, Sapporo Hokuyu Hosp., 6-6 Higashi-Sapporo, Shiroishi-ku, Sapporo 001 Japan
SOURCE: Natural Medicines, (1997) Vol. 51, No. 2, pp. 98-104. ISSN: 1340-3443.
DOCUMENT TYPE: Article

LANGUAGE: English

AB Demethylzeylasteral (Dzy), one of the 22 compounds isolated from a Chinese herbal medicine, Tripterygium wilfordii HOOK. f., was examined for its immunosuppressive and anti-inflammatory activities. At 1,000 nm (0.48 mu-g/ml), Dzy inhibited the blastogenic responses of mouse spleen cells to T and B cell mitogens, the allogenic responses in mixed lymphocyte culture and the consumption of interleukin-2 (IL-2) by lymphocytes but hardly suppressed IL-2 production by lymphocytes, in contrast to cyclosporin A (CsA). When administered orally at a dose of 10 mg/kg Dzy significantly inhibited the delayed-type hypersensitivity in mice. Dzy strongly inhibited carrageenan-induced paw swelling in mice, but not the formation of plaque forming cells in mice at or above 3 mg/kg, and both primary and secondary inflammations in rat adjuvant arthritis at 3 and 10 mg/kg day. The rats treated with either Dzy or CsA in combination with prednisolone exhibited prolonged graft survivals of 60 days or longer, when the control rats rejected the graft. Moreover, combination therapy of Dzy and prednisolone was effective in suppressing ongoing rejection of cardiac graft, demonstrating strong immunosuppressive and anti-inflammatory activities of Dzy and suggesting a possible clinical use of Dzy as an immunosuppressive or anti-inflammatory agent in the fields of organ transplantation as well as autoimmune disorder.

L2 ANSWER 37 OF 95 MEDLINE

ACCESSION NUMBER: 97150001 MEDLINE

DOCUMENT NUMBER: 97150001 PubMed ID: 8996774

TITLE: VCAM-1 and E-selectin expression during cytomegalovirus infection in post-transplant myocardial biopsies.

AUTHOR: Allen M D; King C; MacDonald T O; Himes V

CORPORATE SOURCE: Department of Surgery, University of Washington, Seattle 98195, USA.

SOURCE: CLINICAL TRANSPLANTATION, (1996 Dec) 10 (6 Pt 1) 528-37. Journal code: BB5; 8710240. ISSN: 0902-0063.

PUB. COUNTRY: Denmark

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199704

ENTRY DATE: Entered STN: 19970414
Last Updated on STN: 19970414
Entered Medline: 19970403

AB Adhesion molecule expression may become useful in monitoring **cardiac graft rejection**, but first the question of whether expression is upregulated by cytomegalovirus (CMV), a common post-transplant infection, must be answered. To study this, all cardiac biopsies (n = 201) on 12 cardiac transplant recipients were examined for rejection grade and VCAM-1, ICAM-1, and E-selectin expression over the first 6-15 months post-transplant. Adhesion molecule expression in biopsies taken during documented CMV infections were compared to those taken in the absence of infection, both overall and sorted as to rejection grade. There were 17 CMV infections in this patient group. VCAM-1 was expressed in 82% of biopsies coincident with CMV infections, compared to 43% of biopsies unrelated to CMV infection, a significant difference ($p < 0.01$). E-selectin was expressed in 65% of biopsies with CMV infection, compared to 30% of biopsies unrelated to CMV infection, also statistically significant ($p = 0.01$). Both VCAM-1 and E-selectin were expressed in 80% of biopsies without rejection taken during CMV infections, significantly greater than the 24% incidence of VCAM-1 and 14% incidence of E-selectin expression in biopsies without rejection that were not concomitant with CMV infection. In the absence of CMV infection, both VCAM-1 and E-selectin expression correlated significantly with rejection grade, but this relationship became invalid in the presence of CMV infection. ICAM-1 expression bore no relation to CMV infection. VCAM-1 and E-selectin

expression in cardiac biopsies can be upregulated with CMV infection in the absence of graft rejection.

L2 ANSWER 38 OF 95 MEDLINE
ACCESSION NUMBER: 96416380 MEDLINE
DOCUMENT NUMBER: 96416380 PubMed ID: 8819281
TITLE: Anti-integrin (LFA-1, VLA-4, and Mac-1) antibody treatment and acute **cardiac graft rejection** in the rat.
AUTHOR: Paul L C; Davidoff A; Benediktsson H; Issekutz T
CORPORATE SOURCE: Division of Nephrology, University of Toronto at St. Michael's Hospital, Ontario, Canada.
SOURCE: TRANSPLANT INTERNATIONAL, (1996) 9 (4) 420-5. Journal code: ADY; 8908516. ISSN: 0934-0874.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199702
ENTRY DATE: Entered STN: 19970305
Last Updated on STN: 19970305
Entered Medline: 19970219

AB Cell adhesion molecules mediate interactions with other cells and extracellular matrix, control cell infiltration in sites of inflammation, and regulate cell activation. Previous studies have shown that treatment of rat cardiac transplant recipients with a combination of antibodies against the T-cell integrins LFA-1 and VLA-4 gave a modest prolongation of graft survival. Current experiments were designed to examine the effect of blocking Mac-1, an important monocyte adhesion receptor and mediator of monocyte migration, together with anti-LFA-1 and anti-VLA-4 antibodies on cardiac graft survival and on the graft rejection pattern. The anti-Mac-1, CD11b-specific antibody OX-42 did not affect graft survival time although it did decrease the graft infiltration by rounded, ED-2-positive macrophages.

L2 ANSWER 39 OF 95 MEDLINE DUPLICATE 4
ACCESSION NUMBER: 95297029 MEDLINE
DOCUMENT NUMBER: 95297029 PubMed ID: 7778173
TITLE: Prevention of bone marrow and **cardiac graft rejection** in an H-2 haplotype disparate mouse combination by an anti-LFA-1 antibody.
AUTHOR: Cavazzana-Calvo M; Sarnacki S; Haddad E; De Coene C; Calise D; Yvon E; Cerf-Bensussan N; Fischer A
CORPORATE SOURCE: INSERM U132, Hopital Necker-Enfants Malades, Paris, France.
SOURCE: TRANSPLANTATION, (1995 Jun 15) 59 (11) 1576-82. Journal code: WEJ; 0132144. ISSN: 0041-1337.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199507
ENTRY DATE: Entered STN: 19950720
Last Updated on STN: 19950720
Entered Medline: 19950711

AB The aim of the present study was to compare the preventive effect of a nondepleting monoclonal antibody specific for the LFA-1 alpha chain (CD11a) on the rejection of bone marrow, vascularized cardiac, and nonvascularized skin grafts in the same haplotype-disparate mouse strain combination. A 7-day treatment with a total dose of 0.5 mg of anti-LFA-1 antibody (H-129) had no effect on the rejection of BDF1(H-2b/d) skin grafts by CDF1 (H-2k/d)-treated mice. In contrast, the same treatment regimen significantly prolonged the survival of BDF1 cardiac allografts in

CDF1 mice: 7 out of 10 mice had a functional graft after 70 days, whereas all control mice had rejected their graft by 11 days. Nevertheless, cardiac allografts were ultimately rejected. In contrast, infusion of anti-LFA-1 antibody was able to promote definitive engraftment of T-depleted BDF1 marrow in 9 gray-irradiated CDF1 recipients: in surviving mice, engraftment increased from 10% in controls to 78% in antibody-treated recipients. In mice that tolerated their cardiac graft for more than 70 days, there was a slight delay in the rejection of donor skin graft but no in vitro evidence of tolerance. In contrast, mice with successful marrow engraftment did not reject donor skin graft and failed to mount proliferative and cytotoxic responses against donor alloantigens, whatever the percentage of engrafted donor leukocytes. These results indicate that a nondepleting anti-LFA-1 antibody can efficiently protect against rejection of MHC-incompatible heart and bone marrow. The protective effect of anti-LFA-1 antibody was associated with the induction of T cell tolerance toward donor antigens after bone marrow transplantation.

L2 ANSWER 40 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 4
ACCESSION NUMBER: 1995:367412 BIOSIS
DOCUMENT NUMBER: PREV199598381712
TITLE: Prevention of bone marrow and **cardiac graft rejection** in an H-2 haplotype disparate mouse combination by an anti-LFA-1 antibody.
AUTHOR(S): Cavazzana-Calvo, Marina (1); Sarnacki, Sabine; Haddad, Elie; De Coene, Corinne; Calise, Denis; Yvon, Eric; Cerf-Bensussan, Nadine; Fischer, Alain
CORPORATE SOURCE: (1) INSERM U132, Hopital Necker-Enfants Malades, 149 Rue de Sevres, 75743 Paris Cedex 15 France
SOURCE: Transplantation (Baltimore), (1995) Vol. 59, No. 11, pp. 1576-1582.
ISSN: 0041-1337.
DOCUMENT TYPE: Article
LANGUAGE: English
AB The aim of the present study was to compare the preventive effect of a nondepleting monoclonal antibody specific for the LFA-1 alpha chain (CD11a) on the rejection of bone marrow, vascularized cardiac, and nonvascularized skin grafts in the same haplotype-disparate mouse strain combination. A 7-day treatment with a total dose of 0.5 mg of anti-LFA-1 antibody (H-129) had no effect on the rejection of BDF1(H-2-b/d) skin grafts by CDF1 (H-2-k/d)-treated mice. In contrast, the same treatment regimen significantly prolonged the survival of BDF1 cardiac allografts in CDF1 mice: 7 out of 10 mice had a functional graft after 70 days, whereas all control mice had rejected their graft by 11 days. Nevertheless, cardiac allografts were ultimately rejected. In contrast, infusion of anti-LFA-1 antibody was able to promote definitive engraftment of T-depleted BDF1 marrow in 9 gray-irradiated CDF1 recipients: in surviving mice, engraftment increased from 10% in controls to 78% in antibody-treated recipients. In mice that tolerated their cardiac graft for more than 70 days, there was a slight delay in the rejection of donor skin graft but no in vitro evidence of tolerance. In contrast, mice with successful marrow engraftment did not reject donor skin graft and failed to mount proliferative and cytotoxic responses against donor alloantigens, whatever the percentage of engrafted donor leukocytes. These results indicate that a nondepleting anti-LFA-1 antibody can efficiently protect against rejection of MHC-incompatible heart and bone marrow. The protective effect of anti-LFA-1 antibody was associated with the induction of T cell tolerance toward donor antigens after bone marrow transplantation.

L2 ANSWER 41 OF 95 MEDLINE
ACCESSION NUMBER: 96000600 MEDLINE DUPLICATE 5

DOCUMENT NUMBER: 96000600 PubMed ID: 7578182
TITLE: Methotrexate therapy for complex graft rejection in pediatric heart transplant recipients. The Pediatric Heart Transplant Team--Loma Linda.
AUTHOR: Chinnock R; Emery J; Larsen R; Baum M; Janner D; Razzouk A; Gundry S; Nehlsen-Cannarella S; Bailey L
CORPORATE SOURCE: Department of Pediatrics, Loma Linda University Children's Hospital, Calif. 92350, USA.
SOURCE: JOURNAL OF HEART AND LUNG TRANSPLANTATION, (1995 Jul-Aug) 14 (4) 726-33.
Journal code: A0Q; 9102703. ISSN: 1053-2498.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199512
ENTRY DATE: Entered STN: 19960124
Last Updated on STN: 19960124
Entered Medline: 19951212

AB BACKGROUND: We retrospectively reviewed all pediatric heart transplant recipients at Loma Linda University Medical Center between January 1990 and September 1993 to evaluate the efficacy and safety of methotrexate when it is used for the treatment of graft rejection. METHODS: Twenty-eight of 156 patients (18%) received methotrexate therapy. The dose used for recurrent rejection was 10 mg/m2/week given every 12 hours for three doses. Rejection history, complete blood counts, liver function tests, and infectious complications were reviewed. RESULTS: Eighteen patients were treated for recurrent rejection. Methotrexate was begun at a median of 115 days (13 to 1093 days). Older patients were more likely to receive methotrexate ($p < 0.01$). Efficacy was assessed as rejection episodes (mean +/- standard deviation) occurring in the 2 months before methotrexate administration compared with the 2 months after methotrexate administration and fell from 2.0 +/- 0.2 to 0.6 +/- 0.2 episodes ($p < 0.001$). The rejection rate (rejections per patient-month) fell in treated patients to a rate similar to patients who did not receive methotrexate. Two patients (11%) died while receiving methotrexate. An additional nine patients were treated for acute rejection with hemodynamic compromise, and one was treated for graft-versus-host disease. The incidence of significant infections was 50% (but no deaths were due to infection) during methotrexate therapy in all patients treated ($n = 28$). The minimum white blood cell count in the first month of methotrexate therapy occurred at 2 weeks (median of 2700 to 3500 x 10(6) cells/L). Only one patient had elevated transaminase levels. CONCLUSION: Methotrexate is an effective and safe adjunct in the management of chronic pediatric **cardiac graft rejection**.

L2 ANSWER 42 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 5
ACCESSION NUMBER: 1995:443446 BIOSIS
DOCUMENT NUMBER: PREV199598457746
TITLE: Methotrexate therapy for complex graft rejection in pediatric heart transplant recipients.
AUTHOR(S): Chinnock, Richard (1); Emery, Janet; Larsen, Ranae; Baum, Marti; Janner, Donald; Razzouk, Anees; Gundry, Steve; Nehlsen-Cannarella, Sandra; Bailey, Leonard; Linda, Pediatric Heart Transplant Team-Loma
CORPORATE SOURCE: (1) Pediatric Heart Transplant Program, Loma Linda Univ. Children's Hosp., 11234 Anderson St., Schuman Pavilion Room 1638, Loma Linda, CA 92350 USA
SOURCE: Journal of Heart and Lung Transplantation, (1995) Vol. 14, No. 4, pp. 726-733.
ISSN: 1053-2498.
DOCUMENT TYPE: Article

LANGUAGE: English

AB Background: We retrospectively reviewed all pediatric heart transplant recipients at Loma Linda University Medical Center between January 1990 and September 1993 to evaluate the efficacy and safety of methotrexate when it is used for the treatment of graft rejection. Methods: Twenty-eight of 156 patients (18%) received methotrexate therapy. The dose used for recurrent rejection was 10 mg/m-2/week given every 12 hours for three doses. Rejection history, complete blood counts, liver function tests, and infectious complications were reviewed. Results: Eighteen patients were treated for recurrent rejection. Methotrexate was begun at a median of 115 days (13 to 1093 days). Older patients were more likely to receive methotrexate (p lt 0.01). Efficacy was assessed as rejection episodes (mean +- standard deviation) occurring in the 2 months before methotrexate administration compared with the 2 months after methotrexate administration and fell from 2.0 +- 0.2 to 0.6 +- 0.2 episodes (p lt 0.001). The rejection rate (rejections per patient-month) fell in treated patients to a rate similar to patients who did not receive methotrexate. Two patients (11%) died while receiving methotrexate. An additional nine patients were treated for acute rejection with hemodynamic compromise, and one was treated for graft-versus-host disease. The incidence of significant infections was 50% (but no deaths were due to infection) during methotrexate therapy in all patients treated (n = 28). The minimum white blood cell count in the first month of methotrexate therapy occurred at 2 weeks (median of 2700 to 3500 times 10-6 cells/L). Only one patient had elevated transaminase levels. Conclusion: Methotrexate is an effective and safe adjunct in the management of chronic pediatric **cardiac graft rejection.**

L2 ANSWER 43 OF 95 MEDLINE DUPLICATE 6
ACCESSION NUMBER: 95184717 MEDLINE
DOCUMENT NUMBER: 95184717 PubMed ID: 7879075
TITLE: Endothelial cell antigens associated with accelerated **cardiac graft rejection** in the rat.
AUTHOR: Yasunaga C; Cramer D V; Tuso P J; Fujioka H; Barnett M; Yanaga K; Sugimachi K; Makowka L
CORPORATE SOURCE: Kidney Center, Saiseikai Yahata Hospital, Kitakyushu, Japan.
SOURCE: TRANSPLANTATION PROCEEDINGS, (1995 Feb) 27 (1) 495-6. Journal code: WE9; 0243532. ISSN: 0041-1345.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199504
ENTRY DATE: Entered STN: 19950419
Last Updated on STN: 19950419
Entered Medline: 19950405

L2 ANSWER 44 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 6
ACCESSION NUMBER: 1995:198181 BIOSIS
DOCUMENT NUMBER: PREV199598212481
TITLE: Endothelial cell antigens associated with accelerated **cardiac graft rejection** in the rat.
AUTHOR(S): Yasunaga, C. (1); Cramer, D. V.; Tuso, P. J.; Fujioka, H.; Barnett, M.; Yanaga, K.; Sugimachi, K.; Makowka, L.
CORPORATE SOURCE: (1) Kidney Cent., Saiseikai Yahata Hosp., 5-9-27 Harunomachi, Yahata-Higashiku, Kitakyushu 805 Japan
SOURCE: Transplantation Proceedings, (1995) Vol. 27, No. 1, pp. 495-496.
Meeting Info.: XVth World Congress of the Transplantation

Society Kyoto, Japan August 28-September 2, 1994
ISSN: 0041-1345.
DOCUMENT TYPE: Conference
LANGUAGE: English

L2 ANSWER 45 OF 95 MEDLINE
ACCESSION NUMBER: 96131942 MEDLINE
DOCUMENT NUMBER: 96131942 PubMed ID: 8579737
TITLE: Soluble tumor necrosis factor-receptors are not a useful marker of acute allograft rejection: a study in patients with renal or cardiac allografts.
AUTHOR: Leeuwenberg J F; Froon A H; Vaessen L M; Hoitsma A J; Abramowicz D; van Hooff J P; Buurman W A
CORPORATE SOURCE: Department of General Surgery, University of Limburg, Maastricht, The Netherlands.
SOURCE: TRANSPLANT INTERNATIONAL, (1995) 8 (6) 459-65.
Journal code: ADY; 8908516. ISSN: 0934-0874.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199603
ENTRY DATE: Entered STN: 19960327
Last Updated on STN: 19960327
Entered Medline: 19960321

AB In this study, we investigated soluble tumor necrosis factor receptor (sTNF-R) levels in plasma of patients with either a kidney or cardiac allograft when clinical suspicion of acute rejection was raised. In plasma of patients with acute renal graft rejection, the sTNF-R levels were strongly enhanced (20-150 ng/ml) as compared to plasma of patients with stable renal function. Following successful treatment of the rejection, a gradual decline in sTNF-R levels occurred with improving renal function, and an inverse correlation between creatinine clearance and sTNF-R was found. To determine whether the increase was caused by an accumulation of constitutively released sTNF-R and lack of clearance by the kidney, or whether the immunological process of the rejection caused the enhancement, we measured sTNF-R in patients suffering from acute **cardiac graft rejection** but with predominantly stable kidney function. Rejection of a cardiac graft did not lead to a significant enhancement of sTNF-R levels. However, treatment with ATG or OKT3 did cause enhanced sTNF-R levels, followed by a decline that reached starting values after 7 days. These results provide evidence that the immune reaction that occurs during rejection of a graft does not per se induce discernible changes in sTNF-R levels, whereas that induced by ATG or OKT3 does. Thus, sTNF-R levels are not reliable marker in transplant recipient monitoring.

L2 ANSWER 46 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1996:49172 BIOSIS
DOCUMENT NUMBER: PREV199698621307
TITLE: Inhibition of human endothelial cell apoptosis by cytomegalovirus infection: A mechanisms for arterial intimal hyperplasia.
AUTHOR(S): Kovacs, A.; Weber, M. L.; Burns, L. J.; Jacob, H. J.; Vercellotti, G. M.
CORPORATE SOURCE: Dep. Med., Univ. Minn., Minneapolis, MN USA
SOURCE: Blood, (1995) Vol. 86, No. 10 SUPPL. 1, pp. 372A.
Meeting Info.: 37th Annual Meeting of the American Society of Hematology Seattle, Washington, USA December 1-5, 1995
ISSN: 0006-4971.
DOCUMENT TYPE: Conference
LANGUAGE: English

L2 ANSWER 47 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1995:323739 BIOSIS
DOCUMENT NUMBER: PREV199598338039
TITLE: Pediatric heart transplantation.
AUTHOR(S): Boucek, Mark M. (1); Pietra, Biagio A.
CORPORATE SOURCE: (1) Children's Hosp., Pediatric Cardiol., 1056 East Nineteenth Ave., Box B100, Denver, CO 80218-1088 USA
SOURCE: Current Opinion in Cardiology, (1995) Vol. 10, No. 2, pp. 223-228.
ISSN: 0268-4705.
DOCUMENT TYPE: General Review
LANGUAGE: English

L2 ANSWER 48 OF 95 MEDLINE DUPLICATE 7
ACCESSION NUMBER: 94218970 MEDLINE
DOCUMENT NUMBER: 94218970 PubMed ID: 8165702
TITLE: Differential avidity and cyclosporine sensitivity of committed donor-specific graft-infiltrating cytotoxic T cells and their precursors. Relevance for clinical **cardiac graft rejection.**
AUTHOR: Vaessen L M; Baan C C; Ouwehand A J; Balk A H; Jutte N H; Mochtar B; Claas F H; Weimar W
CORPORATE SOURCE: Department of Internal Medicine I, University Hospital Rotterdam-Dijkzigt, The Netherlands.
SOURCE: TRANSPLANTATION, (1994 Apr 15) 57 (7) 1051-9.
Journal code: WEJ; 0132144. ISSN: 0041-1337.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199405
ENTRY DATE: Entered STN: 19940606
Last Updated on STN: 19940606
Entered Medline: 19940520

AB We have used limiting dilution analysis to study the qualitative and quantitative differences between graft-infiltrating cytotoxic T cell populations propagated from endomyocardial biopsies of heart transplant patients who experienced one or more acute rejection episodes and patients who never showed signs of rejection. Limiting dilution cultures were stimulated with autologous or donor cells both in the absence or in presence of cyclosporine and of CD8 in the cytotoxic phase. Almost all antigen-primed, committed cytotoxic T cells (cCTL) present in the graft of patients with rejections were CsA resistant. In contrast, in most patients of the nonrejector group, a substantial part of the cCTL could be inhibited by CsA. The CTL precursors (pCTL) in both groups were predominantly CsA sensitive. Addition of CD8 mAb during the cytotoxicity phase of the limiting dilution analysis was used to differentiate between CTL populations with high avidity for donor antigens and populations with low avidity. The predominant subpopulation in the graft of rejectors was a CsA-resistant cCTL with high avidity, while in the graft of most nonrejectors, cCTL with low avidity dominated. In most rejectors, CD8 mAb had only a minor influence on the pCTL frequency estimates, and thus on T cells with high avidity. CsA-sensitive pCTL with high avidity might represent an intermediate stage between the naive pCTL and mature, functional, CsA-insensitive cCTL with high avidity for donor antigens.

L2 ANSWER 49 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 7
ACCESSION NUMBER: 1994:261547 BIOSIS
DOCUMENT NUMBER: PREV199497274547
TITLE: Differential avidity and cyclosporine sensitivity of committed donor-specific graft-infiltrating cytotoxic T

cells and their precursors: Relevance for clinical **cardiac graft rejection.**

AUTHOR(S): Vaessen, Lenard M. B. (1); Baan, Carla C.; Ouwehand, Alice J.; Balk, Aggie H. M. M.; Jutte, Nicolet H. P. M.; Mochtar, Bas; Claas, Frans H. J.; Weimar, Willem

CORPORATE SOURCE: (1) Dep. Internal Med. I, Bd 299, Univ. Hosp. Rotterdam-Dijkzigt, Dr Molewaterplein 40, 3015 GD Rotterdam Netherlands

SOURCE: Transplantation (Baltimore), (1994) Vol. 57, No. 7, pp. 1051-1059.
ISSN: 0041-1337.

DOCUMENT TYPE: Article

LANGUAGE: English

AB We have used limiting dilution analysis to study the qualitative and quantitative differences between graft-infiltrating cytotoxic T cell populations propagated from endomyocardial biopsies of heart transplant patients who experienced one or more acute rejection episodes and patients who never showed signs of rejection. Limiting dilution cultures were stimulated with autologous or donor cells both in the absence or in presence of cyclosporine and of CD8 in the cytotoxic phase. Almost all antigen-primed, committed cytotoxic T cells (cCTL) present in the graft of patients with rejections were CsA resistant. In contrast, in most patients of the nonrejector group, a substantial part of the cCTL could be inhibited by CsA. The CTL precursors (pCTL) in both groups were predominantly CsA sensitive. Addition of CD8 mAb during the cytotoxicity phase of the limiting dilution analysis was used to differentiate between CTL populations with high avidity for donor antigens and populations with low avidity. The predominant subpopulation in the graft of rejectors was a CsA-resistant cCTL with high avidity, while in the graft of most nonrejectors, cCTL with low avidity dominated. In most rejectors, CD8 mAb had only a minor influence on the pCTL frequency estimates, and thus on T cells with high avidity. CsA-sensitive CTL with high avidity might represent an intermediate stage between the naive pCTL and mature, functional, CsA-insensitive cCTL with high avidity for donor antigens.

L2 ANSWER 50 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS

ACCESSION NUMBER: 1996:56400 BIOSIS

DOCUMENT NUMBER: PREV199698628535

TITLE: Hemodynamics after cardiac transplantation.

AUTHOR(S): Shumakov, V. I.; Kormer, A. Ya.; Kazakov, E. N.; Chestukhin, V. V.; Khubutiya, M. Sh.; Shemakin, S. Yu.

CORPORATE SOURCE: Res. Inst. Transplant. Artif. Organs, Russ. Minist. Health, Moscow Russia

SOURCE: Kardiologiya, (1994) Vol. 34, No. 5-6, pp. 129-133.
ISSN: 0022-9040.

DOCUMENT TYPE: Article

LANGUAGE: Russian

SUMMARY LANGUAGE: Russian; English

AB Analysis of hemodynamic studies performed in 34 patients is presented. Survival over 1 year in this group of patients discharged alive after transplantation on triple component (cyclosporine A + methylprednisolone + azathioprine) immunosuppressive therapy was 92.2%. Hemodynamic monitoring in posttransplantation period for a mean time of 3 years allowed to make the following conclusions. 1) There are no abnormalities in the pump function and contractility of the transplanted heart. 2) When function of the sinus node is normal heart rate of the graft is higher than that of the innervated heart. In sinus node disfunction implantation of a temporary or permanent pacemaker is required for prevention of hemodynamic disturbances. ODD pacemaker is optimal for normal regulation of the cardiac output of the graft. 3) Increase of loft ventricular afterload due to development of posttransplantation arterial hypertension requires prophylactic hypotensive therapy for prevention of hyperfunction,

hypertrophy, dilatation and subsequent disfunction of the graft. 4) Secondary postcapillary pulmonary hypertension has functional reversible character thus providing normal pre- and afterload for adequate functioning of the transplanted heart. Normalisation of the right ventricular pre- and afterload takes from several months to 1 year depending on the degree of preexisting disturbances of pulmonary circulation, duration of graft ischemia, degree of right ventricular dilatation and tricuspid regurgitation. 5) Incidence of development of reversible right ventricular failure correlates with the level of preexisting grafts right ventricular preload. 6) Derangements of the pump function of the transplanted heart observed during moderate to severe acute or chronic rejection with clinical signs of cardiac failure were analogous to those characteristic for the heart of the recipient in pretransplantation period.

L2 ANSWER 51 OF 95 MEDLINE

ACCESSION NUMBER: 94060050 MEDLINE DUPLICATE 8
DOCUMENT NUMBER: 94060050 PubMed ID: 8241223
TITLE: Serial echocardiographic evaluation of **cardiac graft rejection** after infant heart transplantation.
AUTHOR: Boucek M M; Mathis C M; Kanakriyeh M S; Hodgkin D D; Boucek R J Jr; Bailey L L
CORPORATE SOURCE: Department of Pediatrics and Surgery, Loma Linda University Medical Center, Calif.
SOURCE: JOURNAL OF HEART AND LUNG TRANSPLANTATION, (1993 Sep-Oct) 12 (5) 824-31.
Journal code: A0Q; 9102703. ISSN: 1053-2498.
PUB. COUNTRY: United States
LANGUAGE: Journal; Article; (JOURNAL ARTICLE)
FILE SEGMENT: English
ENTRY MONTH: Priority Journals
ENTRY DATE: 199312
Entered STN: 19940201
Last Updated on STN: 19940201
Entered Medline: 19931223

AB The effects of **cardiac graft rejection** on infant myocardial function as assessed by echocardiography are largely unknown. To quantitate the myocardial response to rejection, serial echocardiographic studies were prospectively performed on 20 infants (less than 1 year of age at transplantation). Two-dimensional guided-M-mode tracings were digitized and quantified with a computer-assisted format. Rejection was diagnosed by clinical criteria, and 85% were graded as mild, that is without cardiac signs or symptoms. Echocardiographic analysis was blinded to rejection status, with studies available 4.2 +/- 2.9 days before rejection, on the day of rejection diagnosis, and 2.9 +/- 1.5 days after rejection treatment. Left ventricular mass increased acutely from 109% of predicted normal to 129% with rejection and decreased to 110% with therapy ($p < 0.01$). Left ventricular volume also tended to fall with rejection and increase with therapy. The left ventricular volume/mass ratio fell from 0.29 +/- 0.10 to 0.25 +/- 0.13 and increased to 0.37 +/- 0.15 ($p < 0.05$) with treatment. Systolic function was depressed by rejection as reflected in the posterior wall thickening fraction and velocity of wall thickening. Diastolic dysfunction was reflected in a decreased velocity of posterior wall thinning (-9.7 +/- 3.9 to -7.7 +/- 2.7 and recovery to -10.8 +/- 3.8 (1/second, $p < 0.05$) and depressed average velocity of cavity enlargement (41.2 +/- 9.6 to 36.4 +/- 8.9 and recovery to 40.7 +/- 8.6 mm/sec, $p < 0.05$). The utility of these echocardiographic measurements to predict rejection has not been prospectively compared with the endomyocardial biopsy. (ABSTRACT TRUNCATED AT 250 WORDS)

L2 ANSWER 52 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 8
ACCESSION NUMBER: 1993:582331 BIOSIS
DOCUMENT NUMBER: PREV199497001701
TITLE: Serial echocardiographic evaluation of **cardiac graft rejection** after infant heart transplantation.
AUTHOR(S): Boucek, Mark M. (1); Mathis, Cheryl M.; Kanakriyeh, Mohammad S.; Hodgkin, Douglas D.; Boucek., Robert J., Jr.; Bailey, Leonard L.
CORPORATE SOURCE: (1) Sect. Cardiol., Univ. Colo. Sch. Med., 1056 E. 19th St., Denver, CO 80218 USA
SOURCE: Journal of Heart and Lung Transplantation, (1993) Vol. 12, No. 5, pp. 824-831.
ISSN: 1053-2498.
DOCUMENT TYPE: Article
LANGUAGE: English
AB The effects of **cardiac graft rejection** on infant myocardial function as assessed by echocardiography are largely unknown. To quantitate the myocardial response to rejection, serial echocardiographic studies were prospectively performed on 20 infants (less than 1 year of age at transplantation). Two-dimensional guided-M-mode tracings were digitized and quantified with a computer-assisted format. Rejection was diagnosed by clinical criteria, and 85% were graded as mild, that is without cardiac signs or symptoms. Echocardiographic analysis was blinded to rejection status, with studies available 4.2 +- 2.9 days before rejection, on the day of rejection diagnosis, and 2.9 +- 1.5 days after rejection treatment. Left ventricular mass increased acutely from 109% of predicted normal to 129% with rejection and decreased to 110% with therapy (p lt 0.01). Left ventricular volume also tended to fall with rejection and increase with therapy. The left ventricular volume/mass ratio fell from 0.29 +- 0.10 to 0.25 +- 0.13 and increased to 0.37 +- 0.15 (p lt 0.05) with treatment. Systolic function was depressed by rejection as reflected in the posterior wall thickening fraction and velocity of wall thickening. Diastolic dysfunction was reflected in a decreased velocity of posterior wall thinning (-9.7 +- 3.9 to -7.7 +- 2.7 and recovery to -10.8 +- 3.8 (1/second, p lt 0.05) and depressed average velocity of cavity enlargement (41.2 +- 9.6 to 36.4 +- 8.9 and recovery to 40.7 +- 8.6 mm/sec, p lt 0.05). The utility of these echocardiographic measurements to predict rejection has not been prospectively compared with the endomyocardial biopsy. We conclude that quantitative echocardiography can detect a consistent pattern of infant left ventricular dysfunction associated with the clinical diagnosis of mild rejection.

L2 ANSWER 53 OF 95 MEDLINE
ACCESSION NUMBER: 93207055 MEDLINE
DOCUMENT NUMBER: 93207055 PubMed ID: 8096120
TITLE: Reduction in cellular and vascular rejection by blocking leukocyte adhesion molecule receptors.
AUTHOR: Sadahiro M; McDonald T O; Allen M D
CORPORATE SOURCE: Department of Surgery, University of Washington, Seattle.
SOURCE: AMERICAN JOURNAL OF PATHOLOGY, (1993 Mar) 142 (3) 675-83.
Journal code: 3RS; 0370502. ISSN: 0002-9440.
PUB. COUNTRY: United States
LANGUAGE: Journal; Article; (JOURNAL ARTICLE)
FILE SEGMENT: English
ENTRY MONTH: Abridged Index Medicus Journals; Priority Journals
ENTRY DATE: 199304
Entered STN: 19930507
Last Updated on STN: 19950206
Entered Medline: 19930416
AB Whether antibody blockage of leukocyte receptors for intercellular adhesion molecule-1 and vascular cell adhesion molecule-1 would prevent

cardiac graft rejection was studied in a rabbit heterotopic transplant model. Monoclonal antibody 60.3, anti-CD18 (intercellular adhesion molecule-1 receptor, Group 1, n = 10) and monoclonal antibody HP1/2, anti-VLA-alpha 4 (vascular cell adhesion molecule-1 receptor, Group 2, n = 10) were administered to transplanted unimmunosuppressed animals. At 7 days, donor heart histology was compared to transplanted untreated controls (Group 3, n = 11). Peripheral white blood cell counts on postoperative day 2 were significantly higher in both treatment groups than controls. Significant increases in circulating neutrophils occurred in Group 1 ($P < or = 0.05$); lymphocytes predominated in Group 2 ($P < or = 0.05$). A significant reduction in cellular rejection was seen in Group 1 ($P < or = 0.05$) but not Group 2 hearts. Group 1 hearts demonstrated localization of lymphocytes to perivenular collections, whereas Group 2 hearts evidenced diffuse interstitial infiltration. Both treatment groups demonstrated a reduction in transplant arteritis compared to controls. Results suggest that monoclonal antibody 60.3 (anti-CD18) may hold promise as a therapeutic agent for both cellular and vascular rejection. Monoclonal antibody HP1/2 (anti-VLA-alpha 4) may reduce vascular rejection disproportionate to cellular rejection.

L2 ANSWER 54 OF 95 MEDLINE DUPLICATE 9

ACCESSION NUMBER: 94037414 MEDLINE
DOCUMENT NUMBER: 94037414 PubMed ID: 7693367
TITLE: E-selectin expression in human cardiac grafts with cellular rejection.
AUTHOR: Allen M D; McDonald T O; Himes V E; Fishbein D P; Aziz S; Reichenbach D D
CORPORATE SOURCE: Division of Cardiothoracic Surgery, University of Washington, Seattle 98195.
SOURCE: CIRCULATION, (1993 Nov) 88 (5 Pt 2) II243-7.
Journal code: DAW; 0147763. ISSN: 0009-7322.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199311
ENTRY DATE: Entered STN: 19940117
Last Updated on STN: 19960129
Entered Medline: 19931129

AB BACKGROUND. E-selectin expression has recently been documented to occur with lymphocytic infiltration in the skin and synovium. The question of whether E-selectin is expressed in the context of **cardiac graft rejection** was addressed in this study. METHODS AND RESULTS. One hundred ninety-five human posttransplant cardiac biopsy specimens were immunoreacted with antibodies to E-selectin and VCAM-1, and endothelial expression of both adhesion molecules was recorded as present or absent. **Cardiac graft rejection** was graded in blinded fashion. The frequency of E-selectin expression was 11% in biopsies without rejection, 36% in mild rejection, and 58% in moderate rejection, a significant correlation ($P < .001$). VCAM-1 expression was present in 11% of biopsies with no rejection, 37% with mild rejection, and 85% with moderate rejection, corroborating the previously reported strong correlation between VCAM-1 expression and graft rejection ($P < .0001$). In 71% of specimens, E-selectin expression coincided with VCAM-1 expression. In the remaining 29% of specimens in which E-selectin and VCAM-1 expression were not both present, isolated E-selectin expression was found more frequently in biopsies with early, increasing rejection, whereas isolated VCAM-1 expression was found more frequently in specimens with established moderate rejection and later, resolving rejection. CONCLUSIONS. E-selectin is expressed in cardiac allograft rejection and may play a role in recruitment of lymphocytes into the graft. Rejection trend analysis suggests that E-selectin expression may be prominent early

in the course of rejection.

L2 ANSWER 55 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 9
ACCESSION NUMBER: 1994:29727 BIOSIS
DOCUMENT NUMBER: PREV199497042727
TITLE: E-selectin expression in human cardiac grafts with cellular rejection.
AUTHOR(S): Allen, Margaret D. (1); McDonald, Thomas O.; Himes, Victoria E.; Fishbein, Daniel P.; Aziz, Salim; Reichenbach, Dennis D.
CORPORATE SOURCE: (1) Dep. Surg., SA-25, Univ. Washington, 1959 NE Pacific St., Seattle, WA 98195 USA
SOURCE: Circulation, (1993) Vol. 88, No. 5 PART 2, pp. II243-II247. ISSN: 0009-7322.
DOCUMENT TYPE: Article
LANGUAGE: English
AB Background. E-selectin expression has recently been documented to occur with lymphocytic infiltration in the skin and synovium. The question of whether E-selectin is expressed in the context of **cardiac graft rejection** was addressed in this study. Methods and Results. One hundred ninety-five human posttransplant cardiac biopsy specimens were immunoreacted with antibodies to E-selectin and VCAM-1, and endothelial expression of both adhesion molecules was recorded as present or absent. **Cardiac graft rejection** was graded in blinded fashion. The frequency of E-selectin expression was 11% in biopsies without rejection, 36% in mild rejection, and 58% in moderate rejection, a significant correlation (P lt .001). VCAM-1 expression was present in 11% of biopsies with no rejection, 37% with mild rejection, and 85% with moderate rejection, corroborating the previously reported strong correlation between VCAM-1 expression and graft rejection (P lt .0001). In 71% of specimens, E-selectin expression coincided with VCAM-1 expression. In the remaining 29% of specimens in which E-selectin and VCAM-1 expression were not both present, isolated E-selectin expression was found more frequently in biopsies with early, increasing rejection, whereas isolated VCAM-1 expression was found more frequently in specimens with established moderate rejection and later, resolving rejection. Conclusions. E-selectin is expressed in cardiac allograft rejection and may play a role in recruitment of lymphocytes into the graft. Rejection trend analysis suggests that E-selectin expression may be prominent early in the course of rejection.

L2 ANSWER 56 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1994:46191 BIOSIS
DOCUMENT NUMBER: PREV199497059191
TITLE: Anti-integrin (LFA-1, VLA-4 and MAC-1) monoclonal antibodies influence graft vasculitis in acute **cardiac graft rejection.**
AUTHOR(S): Paul, L. C. (1); Davidoff, A.; Laverty, D.; Benediktsson, H.; Issekutz, T.
CORPORATE SOURCE: (1) Univ. Calgary, Calgary, AB Canada
SOURCE: Clinical and Investigative Medicine, (1993) Vol. 16, No. 4 SUPPL., pp. B137.
Meeting Info.: Annual Meeting of the Canadian Society for Clinical Investigation and the Royal College of Physicians and Surgeons of Canada Vancouver, British Columbia, Canada September 9-13, 1993
ISSN: 0147-958X.
DOCUMENT TYPE: Conference
LANGUAGE: English

L2 ANSWER 57 OF 95 MEDLINE DUPLICATE 10
ACCESSION NUMBER: 93297011 MEDLINE

DOCUMENT NUMBER: 93297011 PubMed ID: 8516948
TITLE: **Cardiac graft rejection** in hypersensitized recipients: prevention of antibody response and graft rejection using brequinar sodium.
AUTHOR: Yasunaga C; Cramer D V; Chapman F A; Wang H K; Barnett M; Wu G D; Makowka L
CORPORATE SOURCE: Department of Surgery, Cedars-Sinai Research Institute, Cedars-Sinai Medical Center, Los Angeles, California 90211.
SOURCE: TRANSPLANTATION PROCEEDINGS, (1993 Jun) 25 (3 Suppl 2) 65-6.
Journal code: WE9; 0243532. ISSN: 0041-1345.
PUB. COUNTRY: United States
LANGUAGE: Journal; Article; (JOURNAL ARTICLE)
FILE SEGMENT: English
ENTRY MONTH: Priority Journals
ENTRY DATE: 199307
Entered STN: 19930806
Last Updated on STN: 19930806
Entered Medline: 19930721

L2 ANSWER 58 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 10
ACCESSION NUMBER: 1993:444738 BIOSIS
DOCUMENT NUMBER: PREV199345080363
TITLE: **Cardiac graft rejection** in hypersensitized recipients: Prevention of antibody response and graft rejection using brequinar sodium.
AUTHOR(S): Yasunaga, C.; Cramer, Donald V. (1); Chapman, F. A.; Wang, H. K.; Barnett, M.; Wu, G. D.; Makowka, L.
CORPORATE SOURCE: (1) Transplantation Biol. Res. Lab., Dep. Surgery, Cedars-Sinai Res. Inst., Cedars-Sinai Med. Cent., 150 N. Obertson Boulevard, Suite 250N, Beverly Hills, CA 90211 USA
SOURCE: Transplantation Proceedings, (1993) Vol. 25, No. 3 SUPPL. 2, pp. 65-66.
Meeting Info.: Symposium on Brequinar Sodium: A New Immunosuppressive Drug for Transplantation held in conjunction with XIVth International Congress of the Transplantation Society Paris, France August 16, 1992
ISSN: 0041-1345.
DOCUMENT TYPE: Article
LANGUAGE: English

L2 ANSWER 59 OF 95 MEDLINE DUPLICATE 11
ACCESSION NUMBER: 93086098 MEDLINE
DOCUMENT NUMBER: 93086098 PubMed ID: 1333553
TITLE: Changes in myocardial beta-adrenergic receptors during acute rejection of heterotopically transplanted rat hearts.
AUTHOR: Yokoyama H; Ohmi M; Iguchi A; Murata S; Nakame T; Tabayashi K; Mohri H
CORPORATE SOURCE: Department of Thoracic and Cardiovascular Surgery, Tohoku University School of Medicine, Sendai, Japan.
SOURCE: JOURNAL OF THORACIC AND CARDIOVASCULAR SURGERY, (1992 Dec) 104 (6) 1567-71.
Journal code: K9J; 0376343. ISSN: 0022-5223.
PUB. COUNTRY: United States
LANGUAGE: Journal; Article; (JOURNAL ARTICLE)
FILE SEGMENT: English
ENTRY MONTH: Abridged Index Medicus Journals; Priority Journals
ENTRY DATE: 199301
Entered STN: 19930129
Last Updated on STN: 19930129
Entered Medline: 19930106
AB To evaluate changes of the myocardial beta-adrenergic receptors in acute

cardiac graft rejection, the density and binding affinity value of the myocardial beta-adrenergic receptors in heterotopically transplanted rat isografts and allografts were analyzed. Hearts from Fisher rat donors were transplanted either to the Fisher rats (isografts) or to Lewis rats (allografts). Histologic examination of the allografts showed mild to moderate rejection on the seventh and fourteenth days and showed severe rejection on the twenty-first day after transplantation. The density values in the allografts and isografts similarly increased significantly ($p < 0.05$) above the normal level on the seventh and fourteenth days after transplantation. The density in allografts on the twenty-first day decreased significantly ($p < 0.05$) below the normal level, while that in isografts remained at the normal level. In contrast, the binding affinity value of myocardial beta-adrenergic receptors in both isografts and allografts did not change after transplantation. These results demonstrated that myocardial beta-adrenergic receptors presented upregulation in mild to moderate rejection, whereas these receptors presented downregulation in severe rejection. The data suggested that downregulation of myocardial beta-adrenergic receptors plays a major role in decreased cardiac contractility during severe rejection, but not during mild and moderate rejection.

L2 ANSWER 60 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 11
ACCESSION NUMBER: 1993:92113 BIOSIS
DOCUMENT NUMBER: PREV199395047309
TITLE: Changes in myocardial beta-adrenergic receptors during acute rejection of heterotopically transplanted rat hearts.
AUTHOR(S): Yokoyama, Hitoshi (1); Ohmi, Mikio; Iguchi, Atsusi; Murata, Sadayuki; Nakame, Takahiko; Tabayashi, Koichi; Mohri, Hitoshi
CORPORATE SOURCE: (1) Dep. Thoracic Cardiovascular Surgery, Tohoku Univ. Sch. Med., 1-1-Seiryo-machi, Sendai 980 Japan
SOURCE: Journal of Thoracic and Cardiovascular Surgery, (1992) Vol. 104, No. 6, pp. 1567-1571.
ISSN: 0022-5223.
DOCUMENT TYPE: Article
LANGUAGE: English
AB To evaluate changes of the myocardial beta-adrenergic receptors in acute **cardiac graft rejection,** the density and binding affinity value of the myocardial beta-adrenergic receptors in heterotopically transplanted rat isografts and allografts were analyzed. Hearts from Fisher rat donors were transplanted either to the Fisher rats (isografts) or to Lewis rats (allografts). Histologic examination of the allografts showed mild to moderate rejection on the seventh and fourteenth days and showed severe rejection on the twenty-first day after transplantation. The density values in the allografts and isografts similarly increased significantly (p lt 0.05) above the normal level on the seventh and fourteenth days after transplantation. The density in allografts on the twenty-first day decreased significantly (p lt 0.05) below the normal level, while that in isografts remained at the normal level. In contrast, the binding affinity value of myocardial beta-adrenergic receptors in both isografts and allografts did not change after transplantation. These results demonstrated that myocardial beta-adrenergic receptors presented upregulation in mild to moderate rejection, whereas these receptors presented downregulation in severe rejection. The data suggested that downregulation of myocardial beta-adrenergic receptors plays a major role in decreased cardiac contractility during severe rejection, but not during mild and moderate rejection.

L2 ANSWER 61 OF 95 MEDLINE
ACCESSION NUMBER: 93037990 MEDLINE

DOCUMENT NUMBER: 93037990 PubMed ID: 1417403
TITLE: [Can solid state Holter monitoring replace endomyocardial biopsy in patients with heart transplantation?]. Le Holter a memoire solide peut-il remplacer la biopsie endomyocardique chez le transplante cardiaque?.
AUTHOR: Pochmalicki G; Jan F; Benvenuti C; Roux B; Aptecar E; Benhaiem-Sigaux N; Deleuze P; Hillion M L; Loisance D; Cachera J P
CORPORATE SOURCE: Service de cardiologie, CH Leon-Binet, Provins.
SOURCE: ARCHIVES DES MALADIES DU COEUR ET DES VAISSEAUX, (1992 Jun) 85 (6) 847-51. Ref: 11
Journal code: 7SM; 0406011. ISSN: 0003-9683.
PUB. COUNTRY: France
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, MULTICASE)
LANGUAGE: French
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199211
ENTRY DATE: Entered STN: 19930122
Last Updated on STN: 19930122
Entered Medline: 19921112

AB Acute **cardiac graft rejection** after transplantation, the diagnosis of which is based on the findings of endomyocardial biopsy, is associated with a reduction in coronary reserve due to abnormalities of the microcirculation. But this reduction in coronary reserve cause silent myocardial ischaemia (SMI)? In order to assess the frequency of SMI and ventricular arrhythmias during rejection, 53 consecutive Holter recordings were performed in 32 patients (28 men, 4 women, average age 47 +/- 11 years) 11 months after transplantation and within 24 hours of endomyocardial biopsy. The recorder which was used (Monitor One TC) analysed the ST segment in 2 leads in real time: ST segment depression of more than 1 mm lasting over 40 ms, 0.08 s after the J point were considered to be diagnostic of myocardial ischaemia. Although the frequency of SMI is low and not specific for cardiac rejection, its duration was twice as long (80 mn vs 38 mn) in this condition. On the other hand, ventricular arrhythmias are common in cardiac rejection and correlated with its severity according to Billingham's classification (VES p = 0.045; doublets p = 0.035; non-sustained VT p = 0.006).

L2 ANSWER 62 OF 95 MEDLINE DUPLICATE 12
ACCESSION NUMBER: 93214890 MEDLINE
DOCUMENT NUMBER: 93214890 PubMed ID: 1297525
TITLE: Early detection of heart transplant rejection using cardiac echography combined with the assay of glycosylated residues in plasma by proton NMR spectroscopy.
AUTHOR: Vion-Dury J; Mouly-Bandini A; Viout P; Sciaky M; Confort-Gouny S; Monties J R; Cozzone P
CORPORATE SOURCE: Centre de Resonance magnetique biologique et medicale, U.R.A.-C.N.R.S. n. 1186, Faculte de Medecine, Marseille.
SOURCE: COMPTES RENDUS DE L ACADEMIE DES SCIENCES. SERIE III, SCIENCES DE LA VIE, (1992) 315 (12) 479-84.
Journal code: CA1; 8503078. ISSN: 0764-4469.
PUB. COUNTRY: France
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199305
ENTRY DATE: Entered STN: 19930521
Last Updated on STN: 19930521
Entered Medline: 19930506

AB Early diagnosis of acute **cardiac graft**

rejection by non-invasive methods is required for medical, organizational, psychological and economic reasons. We have monitored 18 heart recipients over a period of 2.5 years using endomyocardial biopsies (EMB), cardiac Doppler-echography (CDE) and proton NMR spectroscopy assay of plasma glycosylated residues. Diastolic parameters of CDE and assay of the glycosylated residues by NMR spectroscopy respectively detect 42 and 45% of the acute low grade (mild or moderate) histological rejections. The combination of the two methods allows the detection of 65% of rejections. The strategy combining plasma NMR spectroscopy and echography is pertinent to the non-invasive detection of acute cardiac rejections with low histological grade.

L2 ANSWER 63 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 12
ACCESSION NUMBER: 1993:114981 BIOSIS
DOCUMENT NUMBER: PREV199395059081
TITLE: Early detection of heart transplant rejection using cardiac echography combined with the assay of glycosylated residues in plasma by proton NMR spectroscopy.
AUTHOR(S): Vion-Dury, Jean; Mouly-Bandini, Annick; Viout, Patrick (1); Sciaky, Martine (1); Confort-Gouny, Sylviane (1); Monties, Jean-Raoul; Cozzone, Patrick (1)
CORPORATE SOURCE: (1) Centre Resonance Magnetique Biologique Med., U.R.A.-C.N.R.S. N 1186, Fac. Med., 27 Boulevard Jean-Moulin, 13005 Marseille
SOURCE: Comptes Rendus de l'Academie des Sciences Serie III Sciences de la Vie, (1992) Vol. 315, No. 12, pp. 479-484. ISSN: 0764-4469.
DOCUMENT TYPE: Article
LANGUAGE: English; French
SUMMARY LANGUAGE: English; French
AB Early diagnosis of acute **cardiac graft rejection** by non-invasive methods is required for medical, organizational, psychological and economic reasons. We have monitored 18 hear recipients over a period of 2.5 years using endomyocardial biopsies (EMB), cardiac Doppler-echography (CDE) and proton NMR spectroscopy assay of plasma glycosylated residues. Diastolic parameters of CDE and assay of the glycosylated residues by NMR spectroscopy respectively detect 42 and 45% of the acute low grade (mild or moderate) histological rejections. The combination of the two methods allows the detection of 65% of rejections. The strategy combining plasma NMR spectroscopy and echography is pertinent to the non-invasive detection of acute cardiac rejections with low histological grade.

L2 ANSWER 64 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1993:40375 BIOSIS
DOCUMENT NUMBER: PREV199344017225
TITLE: The role of antibody in **cardiac graft rejection** in hypersensitized recipients: Prevention of antibody response and graft rejection using brequinar sodium.
AUTHOR(S): Yasunaga, Chikao; Cramer, Donald V.; Chapman, Frances A.; Wang, Hong Kai; Barnes, Michelle; Wu, Guo-Du; Makowka, Leonard
CORPORATE SOURCE: Dep. Surg., Transplant. Biol. Res. Lab., Cedars-Sinai Med. Cent., Los Angeles, Calif. USA
SOURCE: Surgical Forum, (1992) Vol. 43, No. 0, pp. 406-408. Meeting Info.: 48th Annual Sessions of the Forum on Fundamental Surgical Problems held at the 78th Clinical Congress of the American College of Surgeons, New Orleans, Louisiana, USA, October 11-16, 1992. SURG FORUM ISSN: 0071-8041.
DOCUMENT TYPE: Article

LANGUAGE: English

L2 ANSWER 65 OF 95 MEDLINE
ACCESSION NUMBER: 93157962 MEDLINE
DOCUMENT NUMBER: 93157962 PubMed ID: 1494787
TITLE: [Acute **cardiac graft rejection** after orthotopic cardiac transplantation. Elements of diagnosis and monitoring, therapeutic attitude]. Le rejet aigu de greffon cardiaque apres transplantation cardiaque orthotopique. Elements de diagnostic et de surveillance, attitude therapeutique.
AUTHOR: Desruennes M; Leger P; Ghoussoub J J; Cabrol A; Delcourt A; Dorent R; Autran B; Pavie A; Cabrol C; Gandjbakhch I
CORPORATE SOURCE: Service du Pr Gandjbakhch, Hopital de Jour, Paris.
SOURCE: THERAPIE, (1992 Jul-Aug) 47 (4) 277-82. Ref: 22
Journal code: VQ6; 0420544. ISSN: 0040-5957.
PUB. COUNTRY: France
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: French
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199303
ENTRY DATE: Entered STN: 19930326
Last Updated on STN: 19930326
Entered Medline: 19930310

AB The diagnosis of acute rejection in heart allograft recipients receiving cyclosporine is still an important challenge. The poor diagnostic value of clinical signs and the ECG means that regular endomyocardial biopsies must be performed. Despite their diagnostic value during the first year after transplantation, endomyocardial biopsies are less sensitive there after and currently suffer from the lack of a universally accepted histological classification. Doppler echocardiography can be used for routine surveillance and has proven reliable for the diagnosis of acute rejection with various clinical presentations when used in conjunction with endomyocardial biopsies. Immunohistological examination of myocardial specimens can further increase the sensitivity of histological diagnosis. Similarly, immunoscintigraphy with indium 111-labelled antimyosin antibodies is of value for the prediction of acute rejection after the first year. Therapeutic approaches have been standardized, but must still be tailored to the individual patient according to the severity of the rejection and the presence of associated infection and/or metabolic disturbances.

L2 ANSWER 66 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1993:265650 BIOSIS
DOCUMENT NUMBER: PREV199344127800
TITLE: Endothelial leukocyte adhesion molecule (ELAM-1) expression in human cellular and hyperacute **cardiac graft rejection**.
AUTHOR(S): Allen, Margaret D.; McDonald, Thomas O.; Fishbein, Daniel; Himes, Victoria; Aziz, Salim; Gordon, David
CORPORATE SOURCE: Univ. Wash. Med. Cent., Seattle, WA
SOURCE: Circulation, (1992) Vol. 86, No. 4 SUPPL. 1, pp. I37.
Meeting Info.: 65th Scientific Sessions of the American Heart Association New Orleans, Louisiana, USA November 16-19, 1992
ISSN: 0009-7322.
DOCUMENT TYPE: Article
LANGUAGE: English

L2 ANSWER 67 OF 95 MEDLINE

ACCESSION NUMBER: 91378750 MEDLINE
DOCUMENT NUMBER: 91378750 PubMed ID: 1898220
TITLE: [Demonstration of abnormalities of myocardial mitochondrial oxygenation in **cardiac graft rejection**].
Mise en evidence d'anomalies de l'oxydation mitochondriale myocardique au cours du rejet de greffe cardiaque.
AUTHOR: Abastado P; Duboc D; Marsac C; Muffat-Joly M; Toussaint M; Perier P; Francois D; Carpentier A; Valty J; Guerin F
CORPORATE SOURCE: Service de cardiologie, hopital Saint-Antoine, Paris.
SOURCE: ARCHIVES DES MALADIES DU COEUR ET DES VAISSEAUX, (1991 Jun) 84 (6) 855-9.
Journal code: 7SM; 0406011. ISSN: 0003-9683.
PUB. COUNTRY: France
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: French
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199110
ENTRY DATE: Entered STN: 19911108
Last Updated on STN: 19911108
Entered Medline: 19911024

AB Abnormalities of myocardial metabolism during acute rejection may be due to ischemia to primary metabolic changes related to rejection. An experimental study of heterotopic cardiac transplantation in the rat was undertaken to study myocardial mitochondrial oxidation during acute rejection. The receivers were Lewis rats and the donors Fischer (FL: allograft) or Lewis (LL: isograft) rats. The oxygen consumption of the mitochondria (VO2m) isolated from the transplanted and native hearts was measured by oxygraphy six days after transplantation. Using maleate and glutamate substrates, the VO2m of transplanted hearts was significantly lower than that of native hearts in the two groups of rats (FL, p less than 0.01; LL, p less than 0.01). In addition, the VO2m of FL allograft transplanted hearts was significantly lower than in the LL rats (30 +/- 9 vs 100 +/- 15 nanoatoms of oxygen/min.mg/prot, p less than 0.01) as was the VO2m of the native hearts (FL: 106 +/- 23 vs LL: 164 +/- 26, p less than 0.02). The respiratory control ratio (RCR) was significantly lower in the transplanted than in the native hearts in both the FL and LL groups (p less than 0.05 and p less than 0.01 respectively). The comparison of the RCR in the two groups (FL vs LL) showed no significant difference for transplanted or native hearts. Electron microscopy of transplanted (rejected or not) and native hearts showed no morphological abnormality of the mitochondria. The lower VO2m of the allograft group indicates a disturbance in the mitochondrial respiratory pathway during acute rejection. (ABSTRACT TRUNCATED AT 250 WORDS)

L2 ANSWER 68 OF 95 MEDLINE DUPLICATE 13
ACCESSION NUMBER: 92069039 MEDLINE
DOCUMENT NUMBER: 92069039 PubMed ID: 1958686
TITLE: Effect of cyclosporine on the uptake of monoclonal antibody to cardiac myosin.
AUTHOR: Allen M D; Shoji Y; Fujimura Y; Eary J F; Reichenbach D D; Thomas R; Gordon D
CORPORATE SOURCE: Department of Nuclear Medicine, University of Washington, Seattle.
SOURCE: JOURNAL OF HEART AND LUNG TRANSPLANTATION, (1991 Sep-Oct) 10 (5 Pt 1) 775-81.
Journal code: A0Q; 9102703. ISSN: 1053-2498.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199201

ENTRY DATE: Entered STN: 19920124
Last Updated on STN: 19990129
Entered Medline: 19920107

AB Monoclonal antibody to cardiac myosin labeled with indium-111 diethylenetriamine pentaacetic acid holds promise as a noninvasive marker of **cardiac graft rejection**. Uptake of antibody has correlated with histologic evidence of rejection in nonimmunosuppressed animals. Whether this correlation will apply with immunosuppression has important clinical implications. Fifty-two heterotopic heart transplantations were performed between isogeneic and nonisogeneic strains of rats. Cyclosporine-treated (15 mg/kg day subcutaneously for 9 days) and untreated control animals were killed on day 9, 48 hours after injection of radiolabeled antibody. Donor and recipient hearts were submitted for scintillation scanning and histologic analysis. In untreated animals, antibody uptake was significantly greater in nonisogeneic than in isogeneic donor hearts, correlating with a significantly higher rejection score and increased myocyte necrosis in the former. Between isogeneic groups, cyclosporine-treated donor hearts had significantly higher antibody uptake and donor/native antibody uptake ratios than did untreated isogeneic hearts. There was, however, no significant difference in the histologic degree of rejection or myocyte necrosis between isogeneic groups. Between cyclosporine-treated and untreated nonisogeneic animals, donor heart antibody uptake and donor-native heart antibody uptake ratios were not significantly different. Nonetheless, the histologic grade of rejection and presence of myocyte necrosis was significantly greater in untreated than in treated nonisogeneic hearts. There were no abnormalities in the native hearts. In this model, cyclosporine treatment correlates with an increased uptake of antimyosin antibody in both isogeneic and nonisogeneic donor hearts, out of proportion to histologic evidence of rejection or myocyte necrosis. This effect may lead to false-positive results in clinical tests utilizing antimyosin antibody uptake as a marker of rejection in the presence of cyclosporine therapy.

L2 ANSWER 69 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 13
ACCESSION NUMBER: 1991:528537 BIOSIS
DOCUMENT NUMBER: BA92:139997
TITLE: EFFECT OF CYCLOSPORINE ON THE UPTAKE OF MONOCLONAL ANTIBODY TO CARDIAC MYOSIN.
AUTHOR(S): ALLEN M D; SHOJI Y; FUJIMURA Y; EARY J F; REICHENBACH D D; THOMAS R; GORDON D
CORPORATE SOURCE: DIV. CARDIOTHORACIC SURGERY, DEP. SURGERY, RF-25, UNIV. WASHINGTON MED. CENT., 1959 N.E. PACIFIC, SEATTLE, WASH. 98195.
SOURCE: J HEART LUNG TRANSPLANT, (1991) 10 (5 PART 1), 775-781. CODEN: JHLTES.
FILE SEGMENT: BA; OLD
LANGUAGE: English

AB Monoclonal antibody to cardiac myosin labeled with indium-111 diethylenetriamine pentaacetic acid holds promise as a noninvasive marker of **cardiac graft rejection**. Uptake of antibody has correlated with histologic evidence of rejection in nonimmunosuppressed animals. Whether this correlation will apply with immunosuppression has important clinical implications. Fifty-two heterotopic heart transplantations were performed between isogeneic and nonisogeneic strains of rats. Cyclosporine-treated (15 mg/kg/day subcutaneously for 9 days) and untreated control animals were killed on day 9, 48 hours after injection of radiolabeled antibody. Donor and recipient hearts were submitted for scintillation scanning and histologic analysis. In untreated animals, antibody uptake was significantly greater nonisogeneic than in isogeneic donor hearts, correlating with a significantly higher rejection score and increased myocyte necrosis in the

former. Between isogeneic groups, cyclosporine-treated donor hearts had significantly higher antibody uptake and donor/native antibody uptake ratios than did untreated isogeneic hearts. There was, however, no significant difference in the histologic degree of rejection or myocyte necrosis between isogeneic groups. Between cyclosporine-treated and untreated nonisogenic animals, donor heart antibody uptake and donor-native heart antibody uptake ratios were not significantly different. Nonetheless, the histologic grade of rejection and presence of myocyte necrosis was significantly greater in untreated than in treated nonisogenic hearts. There were no abnormalities in the native hearts. In this model, cyclosporine treatment correlates with an increased uptake of antimyosin antibody in both isogeneic and nonisogeneic donor hearts, out of proportion to histologic evidence of rejection or myocyte necrosis. This effect may lead to false-positive results in clinical tests utilizing antimyosin antibody uptake as a marker of rejection in the presence of cyclosporine therapy.

L2 ANSWER 70 OF 95 MEDLINE DUPLICATE 14
ACCESSION NUMBER: 92047003 MEDLINE
DOCUMENT NUMBER: 92047003 PubMed ID: 1942772
TITLE: Nature and extent of glomerular injury induced by cyclosporine in heart transplant patients.
AUTHOR: Bertani T; Ferrazzi P; Schieppati A; Ruggenenti P; Gamba A; Parenzan L; Mecca G; Perico N; Imberti O; Remuzzi A; +
CORPORATE SOURCE: Division of Nephrology and Cardiac Surgery, Ospedali Riuniti Bergamo, Italy.
SOURCE: KIDNEY INTERNATIONAL, (1991 Aug) 40 (2) 243-50.
Journal code: KVB; 0323470. ISSN: 0085-2538.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199111
ENTRY DATE: Entered STN: 19920124
Last Updated on STN: 19920124
Entered Medline: 19911125

AB We sought to clarify whether low-dose cyclosporine (5.0 +/- 2.2 mg/kg/day) given for more than two years to prevent **cardiac graft rejection** induced glomerular injury and to quantify the extent of the lesions. After renal hemodynamic studies, renal biopsy specimens were obtained from 10 patients on cyclosporine and analyzed by a novel morphometric technique consisting of a tridimensional reconstruction of the glomerular tuft. Autopsy kidney specimens from three patients with no clinical history of renal disease, and from four patients who died with dilatative cardiomyopathy served as controls. The glomerular filtration rate and renal plasma flow were significantly depressed below normal values in transplant recipients given cyclosporine, averaging 35 +/- 8 and 325 +/- 94 ml/min/1.73 m2, respectively. Conventional light microscopy of specimens from controls and from patients who died with dilatative cardiomyopathy did not reveal renal structural abnormalities. By contrast kidney specimens from cyclosporine-treated patients had obliterative arteriolopathy and ischemic-type changes, with thickening and wrinkling of glomerular capillary wall. Morphometrical analysis of 28 control glomeruli and 40 glomeruli from patients with dilatative cardiomyopathy showed glomerular capillary tuft volumes (VCT) ranging between 1.2 and 2.3 microns 3 x 10(-6), whereas of 102 glomeruli from cyclosporine-treated patients 42.1% had VCT lower than 1.2 microns 3 x 10(-6) and 24.4% VCT higher than 2.3 microns 3 x 10(-6).(ABSTRACT TRUNCATED AT 250 WORDS)

L2 ANSWER 71 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 14
ACCESSION NUMBER: 1991:415850 BIOSIS
DOCUMENT NUMBER: BA92:82815

TITLE: NATURE AND EXTENT OF GLOMERULAR INJURY INDUCED BY CYCLOSPORINE IN HEART TRANSPLANT PATIENTS.
AUTHOR(S): BERTANI T; FERRAZZI P; SCHIEPPATI A; RUGGENENTI P; GAMBA A; PERANZAN L; MECCA G; PERICO N; IMBERTI O; ET AL
CORPORATE SOURCE: INQ.: GIUSEPPE REMUZZI, MARIO NEGRI INST. PHARMACOL. RES., VIA GAVAZZENI 11, 24100 BERGAMO, ITALY.
SOURCE: KIDNEY INT, (1991) 40 (2), 243-250.
CODEN: KDYIA5. ISSN: 0085-2538.
FILE SEGMENT: BA; OLD
LANGUAGE: English

AB We sought to clarify whether low-dose cyclosporine (5.0 .+-. 2.2 mg/kg/day) given for more than two years to prevent **cardiac graft rejection** induced glomerular injury and to quantify the extent of the lesions. After renal hemodynamic studies, renal biopsy specimens were obtained from 10 patients on cyclosporine and analyzed by a novel morphometric technique consisting of a tridimensional reconstruction of the glomerular tuft. Autopsy kidney specimens from three patients with no clinical history of renal disease, and from four patients who died with dilatative cardiomyopathy served as controls. The glomerular filtration rate and renal plasma flow were significantly depressed below normal values in transplant recipients given cyclosporine, averaging 35 .+-. 8 and 325 .+-. 94 ml/min/1.73 m2, respectively. Conventional light microscopy of specimens from controls and from patients who died with dilatative cardiomyopathy did not reveal renal structural abnormalities. By contrast kidney specimens from cyclosporine-treated patients had obliterative arteriopathy and ischemic-type changes, with thickening and wrinkling of glomerular capillary wall. Morphometrical analysis of 28 control glomeruli and 40 glomeruli from patients with dilatative cardiomyopathy showed glomerular capillary tuft volumes (VCT) ranging between 1.2 and 2.3 .mu.m3 .times. 10-6, whereas of 102 glomeruli from cyclosporine-treated patients 42.1% had VCT lower than 1.2 .mu.m3 .times. 10-6 and 24.4% VCT higher than 2.3 .mu.m3 .times. 10-6. Tridimensional reconstruction revealed that 40.1% of glomeruli of cyclosporine-treated patients but none of controls were affected by global or segmental sclerosis which was confined to glomeruli with small and normal VCT. Thus, only 2 out of 25 large glomeruli had sclerotic changes involving, however, less than 0.2% of VCT. We conclude that cyclosporine given for more than two years induced moderate to severe renal failure in all patients associated with obliterative arteriolopathy and glomerular ischemia. In these patients two subpopulations of glomeruli of abnormal size emerged. Lower than normal glomeruli had global or segmental sclerosis. Thus, cyclosporine should be better employed for diseases in which the expected benefits are likely to outweigh its potential for inducing major glomerular functional and structural damage.

L2 ANSWER 72 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1991:520195 BIOSIS
DOCUMENT NUMBER: BR41:120910
TITLE: EXPRESSION OF VASCULAR CELL ADHESION MOLECULE VCAM IN HUMAN **CARDIAC GRAFT REJECTION**.
AUTHOR(S): CARLOS T; GORDON D; HIMES V; BALASSANIAN E; CODAY A; FISHBEIN D; ALLEN M D
CORPORATE SOURCE: UNIV. WASHINGTON, SEATTLE, WASH. 98195.
SOURCE: ELEVENTH ANNUAL MEETING AND SCIENTIFIC SESSIONS OF THE INTERNATIONAL SOCIETY FOR HEART TRANSPLANTATION, PARIS, FRANCE, APRIL 7-9, 1991. J HEART LUNG TRANSPLANT, (1991) 10 (1 PART 2), 171.
CODEN: JHLTES.
DOCUMENT TYPE: Conference
FILE SEGMENT: BR; OLD
LANGUAGE: English

L2 ANSWER 73 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1991:175421 BIOSIS
DOCUMENT NUMBER: BR40:83881
TITLE: CORRELATIONS OF ENDOMYOCARDIAL BIOPSY WITH AUTOPSY FINDINGS IN HUMAN CARDIAC ALLOGRAFTS.
AUTHOR(S): NAKHLEH R E; JONES J; GOSWITZ J J; BRAUNLIN E; KUBO S H; BOLMAN R M III; TITUS J
CORPORATE SOURCE: UNIV. MINN., MINNEAPOLIS, MINN.
SOURCE: UNITED STATES AND CANADIAN ACADEMY OF PATHOLOGY ANNUAL MEETING, CHICAGO, ILLINOIS, USA, MARCH 17-22, 1991. LAB INVEST, (1991) 64 (1), 20A.
CODEN: LAINAW. ISSN: 0023-6837.
DOCUMENT TYPE: Conference
FILE SEGMENT: BR; OLD
LANGUAGE: English

L2 ANSWER 74 OF 95 MEDLINE DUPLICATE 15
ACCESSION NUMBER: 90328803 MEDLINE
DOCUMENT NUMBER: 90328803 PubMed ID: 2375658
TITLE: Three cases of fatal cardiac tamponade following ventricular endocardial biopsy.
AUTHOR: Craven C M; Allred T; Garry S L; Pickrell J; Buys S S
CORPORATE SOURCE: Department of Pathology, University of Utah, Salt Lake City 84132.
SOURCE: ARCHIVES OF PATHOLOGY AND LABORATORY MEDICINE, (1990 Aug) 114 (8) 836-9.
Journal code: 79Z; 7607091. ISSN: 0003-9985.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199008
ENTRY DATE: Entered STN: 19901012
Last Updated on STN: 19901012
Entered Medline: 19900824
AB Three patients had perforation of the ventricular free wall and fatal cardiac tamponade following endocardial biopsy to evaluate congestive heart failure. The number of endocardial biopsies at this institution at the time of the third death was 2372, resulting in an overall mortality rate of 0.13%. Of the 2372 biopsies, 2136 (90%) were performed to evaluate **cardiac graft rejection** and 236 (10%) were performed for other reasons. All the patients who died belonged to the latter group. None of the cardiac transplant patients have had fatal ventricular perforation--a significant difference. At our institution, the frequency of mortality following endocardial biopsy in the noncardiac transplant patients is 1.3%. Patients who have ventricular endocardial biopsy of native hearts rather than transplanted hearts may be at increased risk for fatal perforation.

L2 ANSWER 75 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 15
ACCESSION NUMBER: 1990:445302 BIOSIS
DOCUMENT NUMBER: BA90:95942
TITLE: THREE CASES OF FATAL CARDIAC TAMPONADE FOLLOWING VENTRICULAR ENDOCARDIAL BIOPSY.
AUTHOR(S): CRAVEN C M; ALLRED T; GARRY S L; PICKRELL J; BUYS S S
CORPORATE SOURCE: DEP. PATHOL., UNIV. UTAH, 50 N MEDICAL DR., SALT LAKE CITY, UT 84132.
SOURCE: ARCH PATHOL LAB MED, (1990) 114 (8), 836-839.
CODEN: APLMAS. ISSN: 0003-9985.
FILE SEGMENT: BA; OLD
LANGUAGE: English
AB Three patients had perforation of the ventricular free wall and fatal

cardiac tamponade following endocardial biopsy to evaluate congestive heart failure. The number of endocardial biopsies at this institution at the time of the third death was 2372, resulting in an overall mortality rate of 0.13%. Of the 2372 biopsies, 2136 (90%) were performed to evaluate **cardiac graft rejection** and 236 (10%) were performed for other reasons. All the patients who died belonged to the latter group. None of the cardiac transplant patients have had fatal ventricular perforation-a significant difference. At our institution, the frequency of mortality following endocardial biopsy in the noncardiac transplant patients is 1.3%. Patients who have ventricular endocardial biopsy of native hearts rather than transplanted hearts may be at increased risk for fatal perforation.

L2 ANSWER 76 OF 95 MEDLINE DUPLICATE 16
ACCESSION NUMBER: 90291470 MEDLINE
DOCUMENT NUMBER: 90291470 PubMed ID: 1694110
TITLE: Induction of class II MHC antigen expression on the murine placenta by 5-azacytidine correlates with fetal abortion.
AUTHOR: Athanassakis-Vassiliadis I; Galanopoulos V K; Grigoriou M; Papamatheakis J
CORPORATE SOURCE: Institute of Molecular Biology and Biotechnology, Crete, Greece.
SOURCE: CELLULAR IMMUNOLOGY, (1990 Jul) 128 (2) 438-49. Journal code: CQ9; 1246405. ISSN: 0008-8749.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199008
ENTRY DATE: Entered STN: 19900907
Last Updated on STN: 19960129
Entered Medline: 19900802

AB During the gestational cycle the placental tissue does not express class II MHC antigens and whether this phenomenon is important to fetal survival has not yet been evoked. It has been reported that class II antigen expression precedes renal and **cardiac graft rejection**, which may also be the case in fetal abortion. In a recent report we showed that placental cells can be induced to express class II antigens in vitro and that these cells undergo different regulatory mechanisms depending on their anatomical position in the placenta. Thus, spongiotrophoblast-derived cells express these antigens after interferon-gamma treatment, whereas labyrinthine trophoblast-derived cells are induced by 5-azacytidine. In the present study we examined the effect of 5-azacytidine on class II antigen expression in the placenta and fetal abortion in vivo. We report that 5-azacytidine, when given to pregnant females before the ectoplacental cone formation, dramatically increases fetal loss, which correlates with class II antigen expression in the labyrinthine trophoblast zone. No site effects of 5-azacytidine on placental cell proliferation, splenic T and B cell responses, or reproductive capability of treated females were observed. However, after treatment with 5-azacytidine placental cells can stimulate maternal spleen cells to proliferate in a mixed cell reaction, whereas untreated controls cannot. Furthermore, the abortive effect of 5-azacytidine can be rescued in allogeneic pregnancy by anti-paternal class II monoclonal antibody injection into the animals during the 5-azacytidine treatment. These results suggest that the maintenance of the class II antigen-negative expression on the placenta is indeed necessary to avoid maternal immune attack and ensure fetal survival.

L2 ANSWER 77 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 16
ACCESSION NUMBER: 1990:376469 BIOSIS
DOCUMENT NUMBER: BA90:63150

TITLE: INDUCTION OF CLASS II MHC ANTIGEN EXPRESSION ON THE MURINE PLACENTA BY 5 AZACYTIDINE CORRELATES WITH FETAL ABORTION.
AUTHOR(S): ATHANASSAKIS-VASSILIADIS I; GALANOPOULOS V K; GRIGORIOU M; PAPAMATHEAKIS J
CORPORATE SOURCE: INST. MOL. BIOL. BIOTECHNOL., P.O. BOX 1527-711 10 HERAKLION, CRETE, GREECE.
SOURCE: CELL IMMUNOL, (1990) 128 (2), 438-449.
CODEN: CLIMB8. ISSN: 0008-8749.
FILE SEGMENT: BA; OLD
LANGUAGE: English

AB During the gestational cycle the placental tissue does not express class II MHC antigens and whether this phenomenon is important to fetal survival has not yet been evoked. It has been reported the class II antigen expression precedes renal and **cardiac graft rejection**, which may also be the case in fetal abortion. In a recent report we showed that placental cells can be induced to express class II antigens in vitro and that these cells undergo different regulatory mechanisms depending on their anatomical position in the placenta. Thus, spongiotrophoblast-derived cells express these antigens after interferon-.gamma. treatment, whereas labyrinthine trophoblast-derived cells are induced by 5-azacytidine. In the present study we examined the effect of 5-azacytidine on class II antigen expression in the placenta and fetal abortion in vivo. We report that 5-azacytidine, when given to pregnant females before the ectoplacental cone formation, dramatically increases fetal loss, which correlates with class II antigen expression in the labyrinthine trophoblast zone. No side effects of 5-azacytidine on placental cell proliferation, splenic T and B cell responses, or reproductive capability of treated females were observed. However, after treatment with 5-azacytidine placental cells can stimulate maternal spleen cells to proliferate in a mixed cell reaction, whereas untreated controls cannot. Furthermore, the abortive effect of 5-azacytidine can be rescued in allogeneic pregnancy by anti-paternal class II monoclonal antibody injection into the animals during the 5-azacytidine treatment. These results suggest that the maintenance of the class II antigen-negative expression on the placenta is indeed necessary to avoid maternal immune attack and ensure fetal survival.

L2 ANSWER 78 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1991:12841 BIOSIS
DOCUMENT NUMBER: BR40:1171
TITLE: THE CELLULAR RESPONSE TO XENOTRANSPLANTATION.
AUTHOR(S): FISCHEL R J; KIM W; CAHILL D; MATAS A J
CORPORATE SOURCE: UNIV. MINN., DEP. SURG., BOX 328 UMHC, MINNEAPOLIS, MINN. 55455.
SOURCE: Curr. Surg., (1990) 47 (5), 345-347.
CODEN: CUSUDB. ISSN: 0149-7944.
FILE SEGMENT: BR; OLD
LANGUAGE: English

L2 ANSWER 79 OF 95 MEDLINE
ACCESSION NUMBER: 90165554 MEDLINE
DOCUMENT NUMBER: 90165554 PubMed ID: 2306143
TITLE: HLA histocompatibility affects cardiac transplant rejection and may provide one basis for organ allocation.
AUTHOR: DiSesa V J; Kuo P C; Horvath K A; Mudge G H; Collins J J Jr; Cohn L H
CORPORATE SOURCE: Department of Surgery, Brigham and Women's Hospital, Boston, MA 02115.
SOURCE: ANNALS OF THORACIC SURGERY, (1990 Feb) 49 (2) 220-3; discussion 223-4.
Journal code: 683; 15030100R. ISSN: 0003-4975.
PUB. COUNTRY: United States

Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199003
ENTRY DATE: Entered STN: 19900601
Last Updated on STN: 19900601
Entered Medline: 19900323

AB Prospective human lymphocyte antigen (HLA) typing is not performed for heart transplantation, and the relation between HLA matching and **cardiac graft rejection** is unclear. Recipient and donor HLA matching were analyzed retrospectively in 51 patients undergoing orthotopic cardiac transplantation. Immunosuppression was based on cyclosporine and prednisone. During the mean follow-up of 34 months (range, 16 to 63 months), the 46 operative survivors had an average of 3.95 rejection episodes (range, zero to 11 episodes). Twenty-one patients had steroid-resistant rejection requiring treatment with polyclonal or monoclonal antithymocyte globulin. Human lymphocyte antigen typing was available for 44 patients, and antigens were grouped in broad specificities. Patients with two or more HLA-A or HLA-B matches had a reduced number of rejection episodes (3/10 versus 19/34) and a lower incidence of steroid-resistant rejection (1/10 versus 18/34; p = 0.01). Inclusion of HLA-DR matches did not alter the findings. There was a strong correlation between the increased frequency of rejection and the incidence of steroid-resistant rejection (p less than 0.0001). Four of six late deaths occurred in patients with steroid-resistant rejection; four were due to acute rejection and two to graft atherosclerosis. Although not currently done, prospective HLA matching is feasible with present typing methods. Our results suggest a rationale for prospective histocompatibility testing in cardiac transplantation with allocation of donor hearts to patients with two or more HLA matches.

L2 ANSWER 80 OF 95 MEDLINE DUPLICATE 17
ACCESSION NUMBER: 90085342 MEDLINE
DOCUMENT NUMBER: 90085342 PubMed ID: 2595780
TITLE: Detection of cardiac allograft rejection and myocyte necrosis by monoclonal antibody to cardiac myosin.
AUTHOR: Allen M D; Tsuboi H; Togo T; Eary J F; Gordon D; Thomas R; Reichenbach D D
CORPORATE SOURCE: Department of Surgery, University of Washington, Seattle 98195.
SOURCE: TRANSPLANTATION, (1989 Dec) 48 (6) 923-8.
Journal code: WEJ; 0132144. ISSN: 0041-1337.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199001
ENTRY DATE: Entered STN: 19900328
Last Updated on STN: 19970203
Entered Medline: 19900122

AB Indium 111-labeled monoclonal antibody to cardiac myosin was examined for efficacy in the detection of **cardiac graft rejection** and rejection-related myocyte necrosis. Heterotopic heart transplants were performed in isogenic and allogenic groups of rats (n = 56). At selected intervals posttransplant, uptake of injected antibody in the donor and native hearts was determined by gamma scintillation scanning. Indium uptake was compared to histologic results graded for the severity of rejection and the presence of myocyte necrosis. The donor heart uptake of labeled antibody was significantly greater in both moderate rejection and severe rejection than in lesser degrees of rejection (P = 0.05). The donor/native heart antibody uptake ratio (AUR) in both severe and moderate rejection were significantly different from no

or mild rejection (P = 0.05). In pooled grafts without myocyte necrosis, both the absolute donor heart antibody uptake and the donor/native heart AUR were significantly greater in grafts with moderate or severe rejection than in those with no or mild rejection (P less than 0.001). Among grafts with moderate or severe rejection, those with myocyte necrosis had greater donor heart antibody uptakes and greater donor/native heart AUR than grafts without myocyte necrosis (P less than 0.001). The grade of rejection and the presence of histologic myocyte necrosis appear to be closely related but independent variables, both of which influence antibody uptake. It is concluded that monoclonal antibody to cardiac myosin may be a useful noninvasive tool that could distinguish moderate or severe rejection from lesser degrees of rejection and that could detect the presence of myocyte necrosis.

L2 ANSWER 81 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 17
ACCESSION NUMBER: 1990:89462 BIOSIS
DOCUMENT NUMBER: BA89:48813
TITLE: DETECTION OF CARDIAC ALLOGRAFT REJECTION AND MYOCYTE NECROSIS BY MONOCLONAL ANTIBODY TO CARDIAC MYOSIN.
AUTHOR(S): ALLEN M D; TSUBOI H; TOGO T; EARY J F; GORDON D; THOMAS R; REICHENBACH D D
CORPORATE SOURCE: DIV. CARDIOTHORACIC SURG., DEP. SURG. RF-25, UNIV. WASH., 1959 N.E. PACIFIC, SEATTLE, WASH. 98195.
SOURCE: TRANSPLANTATION (BALTIMORE), (1989) 48 (6), 923-928. CODEN: TRPLAU. ISSN: 0041-1337.
FILE SEGMENT: BA; OLD
LANGUAGE: English
AB Indium111-labeled monoclonal antibody to cardiac myosin was examined for efficacy in the detection of **cardiac graft rejection** and rejection-related myocyte necrosis. Heterotopic heart transplants were performed in isogenic and allogenic groups of rats (n = 56). At selected intervals posttransplant, uptake of injected antibody in the donor and native hearts was determined by gamma scintillation scanning. Indium uptake was compared to histologic results graded for the severity of rejection and the presence of myocyte necrosis. The donor heart uptake of labeled antibody was significantly greater in both moderate rejection and severe rejection than in lesser degrees of rejection (P = 0.05). The donor/native heart antibody uptake ratio (AUR) in both severe and moderate rejection were significantly different from no or mild rejection (P = 0.05). In pooled grafts without myocyte necrosis, both the absolute donor heart antibody uptake and the donor/native heart AUR were significantly greater in grafts with moderate or severe rejection than in those with no or mild rejection (P < 0.001). Among grafts with moderate or severe rejection, those with myocyte necrosis had greater donor heart antibody uptakes and greater donor/native heart AUR than grafts without myocyte necrosis (P < 0.001). The grade of rejection and the presence of histologic myoctye necrosis appear to be closely related but independent variables, both of which influence antibody uptake. It is concluded that monoclonal antibody to cardiac myosin may be a useful noninvasive tool that could distinguish moderate or severe rejection from lesser degrees of rejection and that could detect the presence of myocyte necrosis.

L2 ANSWER 82 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1989:509386 BIOSIS
DOCUMENT NUMBER: BR37:119045
TITLE: THE ROLE OF PRECORDIAL R WAVE MAPPING IN DIAGNOSING **CARDIAC GRAFT REJECTION**.
AUTHOR(S): JANOTA M; BYTESNIK J; URBANOVA D; LEXA J; FABIAN J; KOCANDRLE V
CORPORATE SOURCE: INST. CLIN. EXP. MED., PRAGUE, CS.
SOURCE: XITH CONGRESS OF THE EUROPEAN SOCIETY OF CARDIOLOGY, NICE,

FRANCE, SEPTEMBER 10-14, 1989. EUR HEART J, (1989) 10 (ABSTR SUPPL), 192.
CODEN: EHJODF. ISSN: 0195-668X.
DOCUMENT TYPE: Conference
FILE SEGMENT: BR; OLD
LANGUAGE: English

L2 ANSWER 83 OF 95 MEDLINE
ACCESSION NUMBER: 88221380 MEDLINE
DOCUMENT NUMBER: 88221380 PubMed ID: 3130819
TITLE: [Evaluation by Doppler echocardiography of left ventricular diastolic function in acute graft rejection after heart transplantation].
Evaluation par echocardiographie-Doppler de la fonction diastolique ventriculaire gauche dans le rejet aigu du greffon apres transplantation cardiaque.
AUTHOR: Desruennes M; Corcos T; Lechat P; Rossant P; Leger P; Vaissier E; Pavie A; Gandjbakhch I; Cabrol A; Cabrol C
CORPORATE SOURCE: Service de chirurgie thoracique et cardiovasculaire, Groupe hospitalier Pitie-Salpetriere, Paris, France.
SOURCE: ARCHIVES DES MALADIES DU COEUR ET DES VAISSEAUX, (1988 Feb) 81 (2) 193-8.
Journal code: 7SM; 0406011. ISSN: 0003-9683.
PUB. COUNTRY: France
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: French
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198806
ENTRY DATE: Entered STN: 19900308
Last Updated on STN: 19900308
Entered Medline: 19880622

AB In order to study abnormalities of left ventricular diastolic function (LVDF) in heart transplant patients and their possible association with graft rejection, 21 patients who had recently undergone orthotopic heart transplantation were evaluated prospectively, on the day of endomyocardial biopsy, by pulsed and continuous Doppler echocardiography (DEC). Investigation of the LVDF consisted of pulsed DEC of the mitral valve in apical projection (4 cavities) with measurement of isovolumetric relaxation time (IVR), peak velocity of rapid ventricular filling (E), peak velocity of graft atrial contraction (A) and transmitral gradient decrease half-time (mitral T1/2). Each patients had 5 DEC examinations on average over a 2-month period. In patients with subsevere to severe rejection mitral T1/2 decreased significantly from 76.46 +/- 11.6 ms in the absence of rejection to 47 +/- 13.7 ms during rejection (P less than 0.001). When mitral T1/2 decreased by 25 p. 100 or more between two successive DEC, rejection was present in 89 p. 100 of the cases. It is concluded that Doppler echocardiographic studies of left ventricular diastolic function provide useful information in the follow-up of heart transplant recipients and offer hopes, in a not too distant future, of non-invasive detection of **cardiac graft rejection**.

L2 ANSWER 84 OF 95 MEDLINE
ACCESSION NUMBER: 89029078 MEDLINE
DOCUMENT NUMBER: 89029078 PubMed ID: 3052922
TITLE: Magnetic resonance imaging with gadolinium-DTPA for detecting cardiac transplant rejection in rats.
AUTHOR: Konstam M A; Aronovitz M J; Runge V M; Kaufman D M; Brockway B A; Isner J M; Katzen N A; Dresdale A R; Diehl J T; Kaplan E; +
CORPORATE SOURCE: Department of Medicine, Tufts University, New England Medical Center, Boston, MA 02111.

SOURCE: CIRCULATION, (1988 Nov) 78 (5 Pt 2) III87-94.
Journal code: DAW; 0147763. ISSN: 0009-7322.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 198812
ENTRY DATE: Entered STN: 19900308
Last Updated on STN: 19990129
Entered Medline: 19881215

AB To date, no noninvasive tool has gained widespread acceptance as an adequate substitute for endomyocardial biopsy for the diagnosis and grading of cardiac transplant rejection. We examined the potential role of magnetic resonance imaging with gadolinium (Gd)-diethylenetriamine penta-acetic acid (DTPA) image enhancement for the diagnosis of **cardiac graft rejection**. We studied 15 rats with heterotopic cardiac transplants, nine of which received no immunosuppression, and six of which received cyclosporine, azathioprine, and methylprednisolone. The animals underwent magnetic resonance imaging, which was immediately followed by sacrifice (2-12 days after transplant). Myocardial image enhancement was assessed on T1-weighted images performed before and after administration of Gd-DTPA, 0.5 mmol/kg. Histological specimens were graded I, II, or III to indicate increasing severity of rejection. In the absence of rejection, Gd-DTPA induced mild homogeneous myocardial enhancement. Ten of 11 cases with Grade II or III rejection manifested one or more areas of intense myocardial enhancement. The extent and distribution of intense myocardial enhancement corresponded to the severity and distribution of histological rejection. Quantitative myocardial enhancement, expressed as the ratio of maximal signal intensity after Gd-DTPA to signal intensity before Gd-DTPA administration, separated Grade I animals (1.61 +/- 0.27; mean +/- SD) from Grades II (2.89 +/- 0.58) and III (3.10 +/- 0.77; p less than 0.01) animals. In conclusion, cardiac transplant rejection is characterized by intense T1-weighted image enhancement after administration of Gd-DTPA. Magnetic resonance imaging with Gd-DTPA thus has potential application in the clinical diagnosis of cardiac transplant rejection.

L2 ANSWER 85 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1988:305025 BIOSIS
DOCUMENT NUMBER: BR35:21849
TITLE: **CARDIAC GRAFT REJECTION** WITH NEGATIVE LIGHT MICROSCOPIC FINDINGS DETECTED BY IMMUNOFLUORESCENCE.
AUTHOR(S): YOWELL R; HAMMOND E; O'CONNELL J
CORPORATE SOURCE: LDS HOSP., UTAH.
SOURCE: EIGHTH ANNUAL SCIENTIFIC SESSIONS OF THE INTERNATIONAL SOCIETY FOR HEART TRANSPLANTATION, LOS ANGELES, CALIFORNIA, USA, APRIL 20-22, 1988. J HEART TRANSPLANT, (1988) 7 (1), 61.
CODEN: JHTRES.
DOCUMENT TYPE: Conference
FILE SEGMENT: BR; OLD
LANGUAGE: English

L2 ANSWER 86 OF 95 MEDLINE
ACCESSION NUMBER: 87175376 MEDLINE
DOCUMENT NUMBER: 87175376 PubMed ID: 2951699
TITLE: [Is myoglobin a marker of **cardiac graft rejection**?].
La myoglobine est-elle un marqueur de rejet de greffe cardiaque?.
AUTHOR: Massoubre B; Mainard F; Petit T; Delajartre A Y; Madec Y

SOURCE: PRESSE MEDICALE, (1987 Mar 28) 16 (11) 540.
Journal code: PMT; 8302490. ISSN: 0755-4982.
PUB. COUNTRY: France
Letter
LANGUAGE: French
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198705
ENTRY DATE: Entered STN: 19900303
Last Updated on STN: 19900303
Entered Medline: 19870520

L2 ANSWER 87 OF 95 MEDLINE
ACCESSION NUMBER: 92173490 MEDLINE
DOCUMENT NUMBER: 92173490 PubMed ID: 2979977
TITLE: The total artificial heart: indications and preliminary results.
AUTHOR: De Paulis R; Riebman J B; Deleuze P; Olsen D B
CORPORATE SOURCE: Institute for Biomedical Engineering, University of Utah, Salt Lake City.
SOURCE: JOURNAL OF CARDIAC SURGERY, (1987 Jun) 2 (2) 275-81. Ref: 30
Journal code: BEN; 8908809. ISSN: 0886-0440.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199204
ENTRY DATE: Entered STN: 19920424
Last Updated on STN: 19920424
Entered Medline: 19920409

AB The development of the total artificial heart (TAH) has reached a level where it is now available for clinical applications. The TAH has demonstrated distinct advantages over other forms of mechanical circulatory assistance. As of December 1, 50 TAHs have been implanted: 5 as permanent devices, and 45 as a temporary mechanical bridge to cardiac transplantation. The use of the TAH has increased in the last several months, leading to a growing interest in defining the indications and contraindications to its use. End-stage cardiomyopathy (either idiopathic, ischemic, viral, or postpartum) has been the underlying disease in 80% of the TAH procedures to date. The TAH has also been applied in 5 cases of acute **cardiac graft rejection**, 2 cases of congenital heart diseases, and in one case after acute myocardial infarction. The indications for the use of the TAH in these and other potential patient groups is discussed in light of the current clinical results.

L2 ANSWER 88 OF 95 MEDLINE
ACCESSION NUMBER: 87127258 MEDLINE
DOCUMENT NUMBER: 87127258 PubMed ID: 3101640
TITLE: [Detection of **cardiac graft rejection** using proton nuclear magnetic resonance]. Detection du rejet de greffe cardiaque par resonance magnetique nucleaire du proton.
AUTHOR: Lechat P; Eugene M; Hadjiisky P; Teillac A; Cabrol C; Grosgogeat Y
SOURCE: ARCHIVES DES MALADIES DU COEUR ET DES VAISSEAUX, (1986 Aug) 79 (9) 1356-60.
Journal code: 7SM; 0406011. ISSN: 0003-9683.
PUB. COUNTRY: France
Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: French
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198702
ENTRY DATE: Entered STN: 19900303
Last Updated on STN: 19900303
Entered Medline: 19870226

AB Rejection of cardiac transplants can be detected by NMR imaging if it is associated with a change in myocardial T1 and/or T2 proton relaxation time. T1 and T2 were studied in 14 Lewis rats that underwent heterotopic cardiac transplantation. T1 and T2 were measured in vitro immediately after sacrifice 3, 4, 7 or 11 days after the graft using a Minispec BRUKER PC20. The myocardial water content was measured by dehydration in a vacuum for 24 hours. Histological analysis of sections classified the rejection process in 4 stages according to the degree of lymphocyte infiltration and percentage of myolysis. There was a significant difference between the ortho and heterotopic hearts: (Formula: see text). In particular, there was highly significant relationship between T2 and the stage of rejection ($r = 0.90$, $p < 0.005$), and between T2 and % myolysis ($r = 0.84$, $p < 0.005$). In addition, there was a close relationship between the T2 of the ortho and heterotopic hearts and their water content ($r = 0.95$, $p < 0.001$). If these results are confirmed in man, is should be possible to detect rejection by NMR imaging using sequences of activation concentrating on changes of T2.

L2 ANSWER 89 OF 95 MEDLINE DUPLICATE 18
ACCESSION NUMBER: 86309266 MEDLINE
DOCUMENT NUMBER: 86309266 PubMed ID: 3528666
TITLE: Right-sided cardiac transplantation: importance of functional valves.
AUTHOR: Yee E S; Aherne T; Garrett J S; Lipton M J; Ebert P A
SOURCE: JOURNAL OF SURGICAL RESEARCH, (1986 Jun) 40 (6) 564-8.
Journal code: K7B; 0376340. ISSN: 0022-4804.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198610
ENTRY DATE: Entered STN: 19900321
Last Updated on STN: 19900321
Entered Medline: 19861020

AB An original surgical procedure had been developed entailing the implantation of a right-sided heterotrophic cardiac graft in 14 dogs. The benchwork preparation included creation of both atrial and ventricular septal defects which allowed transplantation with the avoidance of extracorporeal circulation and the utilization of all transplanted myocardium and parts. The structure and function of this graft were sequentially evaluated using rapid cine-computed tomograms which permitted assessment of forward graft flow, ventricular wall contraction, and diastolic thickness for both the native and grafted hearts. These parameters were followed during the early (E) (less than 3 days), intermediate (I) (4-21 days), and late (L) (greater than 21 days) postoperative periods. Forward flow (E: 3.0, I: 1.5, L: 2.6) through the transplant was maintained by the competence of the implanted valves despite a progressive decrease in the contraction (E: 3.0, I: 1.3, L: 1.0) and associated decrease in the wall thickness (E: 3.0, I: 2.6, L: 2.4). These findings were consistent with severe **cardiac graft rejection** without immunosuppression. In summary, long-term structural and functional forward flow of this configurated right-sided transplantation had been maintained by the competent valves on both sides of the graft despite severe rejection without immunosuppression as documented by rapid cine-computed tomograms.

L2 ANSWER 90 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 18
ACCESSION NUMBER: 1987:24164 BIOSIS
DOCUMENT NUMBER: BA83:14098
TITLE: RIGHT-SIDED CARDIAC TRANSPLANTATION IMPORTANCE OF FUNCTIONAL VALVES.
AUTHOR(S): YEE E S; AHERNE T; GARRETT J S; LIPTON M J; EBERT P A
CORPORATE SOURCE: DEP. SURGERY, UNIV. CALIF., SAN FRANCISCO, CALIF. 94143.
SOURCE: J SURG RES, (1986) 40 (6), 564-568.
CODEN: JSGRA2. ISSN: 0022-4804.
FILE SEGMENT: BA; OLD
LANGUAGE: English

AB An original surgical procedure had been developed entailing the implantation of a right-sided heterotrophic cardiac graft in 14 dogs. The benchwork preparation included creation of both atrial and ventricular septal defects which allowed transplantation with the avoidance of extracorporeal circulation and the utilization of all transplanted myocardium and parts. The structure and function of this graft were sequentially evaluated using rapid cine-computed tomograms which permitted assessment of forward graft flow, ventricular wall contraction, and diastolic thickness for both the native and grafted hearts. These parameters were followed during the early (E) (< 3 days), intermediate (I) (4-21 days), and late (L) (> 21 days) postoperative periods. Forward flow (E: 3.0, I: 1.5, L: 2.6) through the transplant was maintained by the competence of the implanted valves despite a progressive decrease in the contraction (E: 3.0, I: 1.3, L: 1.0) and associated decrease in the wall thickness (E: 3.0, I: 2.6, L: 2.4). These findings were consistent with severe **cardiac graft rejection** without immunosuppression. In summary, long-term structural and functional forward flow of this configurated right-sided transplantation had been maintained by the competent valves on both sides of the graft despite severe rejection without immunosuppression as documented by rapid cine-computed tomograms.

L2 ANSWER 91 OF 95 MEDLINE DUPLICATE 19
ACCESSION NUMBER: 86262774 MEDLINE
DOCUMENT NUMBER: 86262774 PubMed ID: 2941907
TITLE: Rejection of murine cardiac allografts. I. Relative roles of major and minor antigens.
AUTHOR: Burdick J F; Clow L W
CONTRACT NUMBER: AI-15081 (NIAID)
SOURCE: TRANSPLANTATION, (1986 Jul) 42 (1) 67-72.
Journal code: WEJ; 0132144. ISSN: 0041-1337.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198608
ENTRY DATE: Entered STN: 19900321
Last Updated on STN: 19970203
Entered Medline: 19860808

AB The relative contributions of incompatibilities for class I, class II, or minor antigens to primarily vascularized graft rejection have not been previously compared in large numbers of strains. In our experiments, murine primarily vascularized heterotopic **cardiac graft rejection** was studied in 16 donor-recipient strain combinations, representing different precisely defined major and/or minor histoincompatibilities. Complete major incompatibilities generally produced strong graft rejection, although it was confirmed that prolonged survival occurs in certain combinations that are incompatible for class I, or class I plus class II, antigens. In addition, however, strong rejection of these grafts was produced in some recipient strains when the donor was incompatible only for minor antigens. This strong effect of minor antigens

may reflect their strong stimulation of delayed-type hypersensitivity, whereas the influence of class II antigens seems more related to stimulation of mixed lymphocyte culture generation of lymphocyte-mediated cytotoxicity.

L2 ANSWER 92 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 19
ACCESSION NUMBER: 1986:397668 BIOSIS
DOCUMENT NUMBER: BA82:83148
TITLE: REJECTION OF MURINE CARDIAC ALLOGRAFTS I. RELATIVE ROLES OF MAJOR AND MINOR ANTIGENS.
AUTHOR(S): BURDICK J F; CLOW L W
CORPORATE SOURCE: DIVISION OF TRANSPLANTATION AND VASCULAR SURGERY, JOHNS HOPKINS UNIVERSITY, BALTIMORE, MARYLAND.
SOURCE: TRANSPLANTATION (BALTIMORE), (1986) 42 (1), 67-72.
CODEN: TRPLAU. ISSN: 0041-1337.
FILE SEGMENT: BA; OLD
LANGUAGE: English
AB The relative contributions of incompatabilities for class I, class II, or minor antigens to primarily vascularized graft injection have not been previously compared in large numbers of strains. In our experiments, murine primarily vascularized heterotopic **cardiac graft rejection** was studied in 16 donor-recipient strain combinations, representing different precisely defined major and/or minor histoincompatabilities. Complete major incompatibilities generally produced strong graft rejection, although it was confirmed that prolonged survival occurs in certain combinations that are incompatible for class I, or class I plus class II, antigens. In addition, however, strong rejection of these grafts was produced in some recipient strains when the donor was incompatible only for minor antigens. This strong effect of minor antigens may reflect their strong stimulation of delayed-type hypersensitivity, whereas the influence of class II antigens seems more related to stimulation of mixed lymphocyte culture generation of lymphocyte-mediated cytotoxicity.

L2 ANSWER 93 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1982:201437 BIOSIS
DOCUMENT NUMBER: BA73:61421
TITLE: HEART AND SPLEEN TWIN GRAFTS IN RATS 2. DELAYED HOST SPLENECTOMY.
AUTHOR(S): TAUBER J W; BLANCHARD J M
CORPORATE SOURCE: DEP. SURG., UNIV. ILL. MED. CENT., P.O. BOX 6998, CHICAGO, ILL. 60680.
SOURCE: J MICROSURG, (1981) 2 (4), 261-268.
CODEN: JMICDU.
FILE SEGMENT: BA; OLD
LANGUAGE: English
AB Simultaneous auxiliary transplantation of the spleen has been shown to delay and attenuate the rejection of cardiac grafts in rats. A total of 144 such twin grafts in Lewis and ACl rats were explored to determine whether removal of the host's spleen would further facilitate graft survival in this model. Thus, 87 rats were submitted to host splenectomy at various time intervals after implantation of the twin grafts. After considerable technical problems were overcome, it was found that this additional maneuver induced permanent (> 5 mo.) survival in 64% of Lewis-to-ACl twin grafts. The important requirement for this success was timing; delaying host splenectomy for 3-5 days after implantation of the twin graft was mandatory.

L2 ANSWER 94 OF 95 MEDLINE DUPLICATE 20
ACCESSION NUMBER: 76001808 MEDLINE
DOCUMENT NUMBER: 76001808 PubMed ID: 1098809
TITLE: The status of cardiac transplantation, 1975.

AUTHOR: Rider A K; Copeland J G; Hunt S A; Mason J; Specter M J; Winkle R A; Bieber C P; Billingham M E; Dong E Jr; Griepp R B; Schroeder J S; Stinson E B; Harrison D C; Shumway N E
SOURCE: CIRCULATION, (1975 Oct) 52 (4) 531-9. Ref: 25
Journal code: DAW; 0147763. ISSN: 0009-7322.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 197511
ENTRY DATE: Entered STN: 19900313
Last Updated on STN: 19980206
Entered Medline: 19751126

AB Since December 1967, 263 human cardiac transplant operations have been performed throughout the world. Eighty-two of these were performed at Stanford University Medical Center, In 1974, 27 such operations were performed, 15 at Stanford Survival rates for the entire Standford series are 48% at one year and 25% at three years; survival rates at one and three years for patients surviving the first three critical months after transplantation are 77% and 42%, respectively. Recipients under the age of 55 years, with New York Heart Association Class IV cardiac disability, are selected for transplant procedures according to criteria dictated by experience over the past seven years. A routine immunsuppressive regimen for organ transplantation, incorporating prednisone, azathioprine, and antithymocyte globulin is employed early postoperatively, and prednisone and azathioprine are used for indefinite maintenance therapy. Acute **cardiac graft rejection** in nearly all recipients is diagnosed by clinical signs, electrocardiographic changes, and percutaneous transvenous endomyocardial biopsy. Ninety-five percent of acute rejection episodes are reversible with appropriate immunosuppressive treatment, but infectious complications are common and have accounted for 56% of all postoperative deaths. The Stanford experience in cardiac transplantation has demonstrated the potential therapeutic value of this procedure. Maximum survival now extends beyond five years. Satisfactory graft function has been documented in long-term surviving patients, the majority of whom have enjoyed a high degree of social and physical rehabilitation.

L2 ANSWER 95 OF 95 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 20
ACCESSION NUMBER: 1976:124110 BIOSIS
DOCUMENT NUMBER: BA61:24110
TITLE: THE STATUS OF CARDIAC TRANSPLANTATION 1975.
AUTHOR(S): RIDER A K; COPELAND J G; HUNT S A; MASON J; SPECTER M J; WINKLE R A; BIEBER C P; BILLINGHAM M E; DONG E JR; ET AL.
SOURCE: CIRCULATION, (1975) 52 (4), 531-539.
CODEN: CIRCAZ. ISSN: 0009-7322.
FILE SEGMENT: BA; OLD
LANGUAGE: Unavailable